

**The influence of Chinese cultural custom and policy
practice on doctoral supervision
in the Management discipline in China**

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A thesis submitted for the degree of Doctor of Philosophy of
The Australian National University

STATEMENT OF ORIGINAL AUTHORSHIP

I certify that the substance of this thesis is my own original work, and this thesis has not been submitted for any degree.

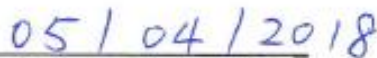
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ABSTRACT

Although China has the largest population of doctoral candidates and doctoral graduates in recent years, China currently still suffers from a shortage of effective supervisors, particularly who have a high reputation, working in high ranking universities. Two reasons cause this result. One reason is the number of doctoral candidates has dramatically increased in last four decades, and more than half of the candidates prefer to commence their doctoral journey in high reputation universities. The other reason is because most doctoral supervisors in these universities are generally selected only from the group of ‘Professor’, so the number of doctoral supervisors is limited. As a result, Chinese doctoral supervision, particularly in high ranking universities, has drawn the increasing attention of researchers.

Compared to other disciplines, the Management discipline is a very popular and emergent subject in China. According to a report in 2015, four of the top ten popular subjects are linked with the Management discipline (EOL 2015). Furthermore, the theory and practice in the Management discipline is influenced by traditional culture and present policies (Guo, Y 2014; Lv 2011). Therefore, the effective doctoral supervision in the Management discipline in China has been focused on, rather than other disciplines. Much research on effective doctoral supervision in Western countries has been conducted (Agu & Odimegwu 2014; Collins 2015). However, there is little published research focusing on Chinese doctoral supervision, particular in the Management discipline. In this thesis, I argue that the Chinese cultural custom, and present policy practice influence doctoral supervision.

Qualitative methods were used and case study was adopted in this research. The researcher collected the data via face to face, one to one interviews from a leading Chinese university in Beijing. All 39 interviewees, who were from three groups including students, supervisors and graduates, who studied or worked in this university, participated in this research are volunteers.

A theory has been established from this thesis through refining the data results with the assistance of Nvivo 10.0 software. This theory includes two models: the model of doctoral

supervision in Management and the *pinde* model. The model of doctoral supervision indicated that within the influence of cultural custom and policy practice of China, Chinese doctoral supervisors had two main duties: cultivating people and delivering academic knowledge and skills. Based on the two main duties, even if Chinese doctoral supervisors would offer the individual one-to-one training for each doctoral candidate, they preferred to do more group-way education and *pinde* education during the whole doctoral supervision process. The results from all interviews emphasised that doctoral supervisors remain in familial relationships with their candidates and use family-style approach to manage their candidates. This theory also indicated a *pinde* model in the contemporary Chinese academic system.

The findings in this study contribute to fill in the knowledge gap of doctoral supervision in China and the Management field, and provide a valuable Chinese theory. It is important, because the theories or models from Western countries do not necessarily work well within the Chinese context.

PRESENTATIONS BY THE CANDIDATE RELEVANT TO THE THESIS

Zhang, Y 2010, '浅析中澳博士教育对比'. Conference paper presented at 领导人才论坛, 北京.

Zhang, Y 2014, 'Factors influencing to effective doctoral supervision in Management in China', in M Picard & A McCulloch (eds). Conference paper presented at *The 11th Biennial quality in postgraduate research (QPR) conference*, Adelaide, p. 189.

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ABBREVIATIONS

ANU	Australian National University
B.C.	Before Christ
CCP	Chinese Communist Party
CVF	The Competing Values Framework
DIISR	Department of Innovation, Industry, Science, Research and Tertiary Education
HDR	Higher Degree by Research
ICVF	The Integrated Competing Values Framework
MOE	The Ministry of Education of People's Republic of China
MOHRSS	Ministry of Human Resources and Social Security
NBS	National Bureau of Statistics of the People's Republic of China
PKU	Peking University
<i>Pinde</i>	Daode pinzhi
RQs	Research Questions
RTP	Research Training Program

GLOSSARY OF CHINESE TERMS

	Chinese Terms pinyin (no diacritic) pinyin (diacritic) Chinese characters	Definitions
1	<i>bentuhua</i> <i>běntúhuà</i> 本土化	The process of combination between Western countries and current existing Chinese problems is called <i>bentuhua</i> (Sinification) in Chinese. <i>Bentuhua</i> includes the <i>zhongguohua</i> , and <i>diyuhua</i> (Wang, X & Song 2013).
2	<i>diyuhua</i> <i>diùyùhuà</i> 地域化	<i>Diyuhua</i> emphasises the typical features of location and industry (Wang, X & Song 2013), which involve the present local political, economic, education policies and legislations (Chen, J 2013; Guo, Y 2014; Zhang, X & Huang 2003).
3	<i>huji</i> <i>hùjǐ</i> 户籍	<i>Huji policy</i> : is an administration policy for the Chinese population. The Chinese <i>huji</i> policy has two main functions. One function is that the departments of Chinese government collect, register and confirm the citizens' basic information, according to the requirements of relevant constitutions and provisions (Liu, L 2014; Tao & Wang 2014). The other function of the <i>huji</i> policy links a series of social and welfare policies regarding migration within China (Hu, X 2014; Tao & Wang 2014).
4	<i>keju</i> <i>kējǔ</i> 科举	<i>Keju</i> are the series of policies and processes of selecting and preparing talented people as government officials through imperial examinations in ancient China (Huang, S 2014; Li, MZ 2016; Liu, H 2008; Zhang, C 2014).
5	<i>paqianzheng</i> <i>pàiqiǎnzhèng</i> 派遣证	The <i>paqianzheng</i> is a paper document which is distributed by the Chinese government. The Chinese universities have the authority to send the graduates to work in identified enterprises or government institutions in certain cities, if the enterprises agree at the same time to give the offers to the graduates (Zhao, X 2005).
6	<i>pinde</i> <i>pǐndé</i> 品德	<i>Pinde</i> named <i>daode pinzhi</i> , which has been abbreviated by <i>pinde</i> or <i>de</i> (He 2011; Qiu 2013; Wu, L, Wang & Zuo 2013), are an individual's stable psychological characteristics and tendencies, which are shown by a series of individual behaviours, according to the codes of conduct of social ethics and morality (He 2011). In the Chinese context, political attitudes and complying with law and legislation belong to the one of psychological characteristics.
7	<i>pinxing</i> <i>pǐnxíng</i> 品行	<i>Pinxing</i> , which involved good <i>pinde</i> and behaviours (Ministry of Education of the People's Republic of China 2014).
8	<i>sushi</i> <i>sùzhì</i> 素质	<i>Suzhi</i> “refers to individuals’ quality, which is predetermined by biological inheritance, yet can be molded thereafter by the external environment, postnatal education and training and by practice” (Wang, MM et al. 2014, p. 159).
9	<i>tongmen</i> <i>tóngmén</i> 同门	Within the Chinese context, PhD students, who were supervised by the same supervisor are called <i>tongmen</i> (Chen & Gu 2001).
10	<i>Zhongguohua</i> <i>Zhōngguóhuà</i> 中国化	<i>Zhongguohua</i> includes the traditional Chinese national culture, political, and Chinese social context, embedded in Chinese daily behaviours (Wang, X & Song 2013).

Note: There are three ways to show Chinese terms in China. For example

- *Bentuhua* means Chinese pinyin without diacritic tone-signifiers;
- *běntúhuà* means Chinese pinyin with diacritic tone-signifier; and
- 本土化 means Chinese characters.

In this thesis, when you see the words printed this way, such as: *bentuhua* or *běntǔhuà* mean Chinese pinyin. Sometimes pinyin with diacritic tone-signifier, such as *běntǔhuà* is used in China, but this way is not common practise. I am going to use pinyin without diacritic tone-signifiers, such as *bentuhua*, and Chinese characters, such as 本土化, at the first time in my thesis. After that, I will use only simple pinyin without diacritic.

Chapter 1:

Introduction

This thesis explores how the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China. This chapter outlines this thesis as Figure 1.1 shows. This chapter begins with the cultural custom and policy practice background relevant to doctoral supervision in contemporary China (Section 1.1) and then follows the descriptions of the research problem and research questions (Section 1.2). The foremost definitions (Section 1.3) are listed. This is followed by the brief overview to the methodology and research design (Section 1.4), and the outline of the thesis (Section 1.5). Delimitations of this study (Section 1.6) are introduced in the final section of this chapter.

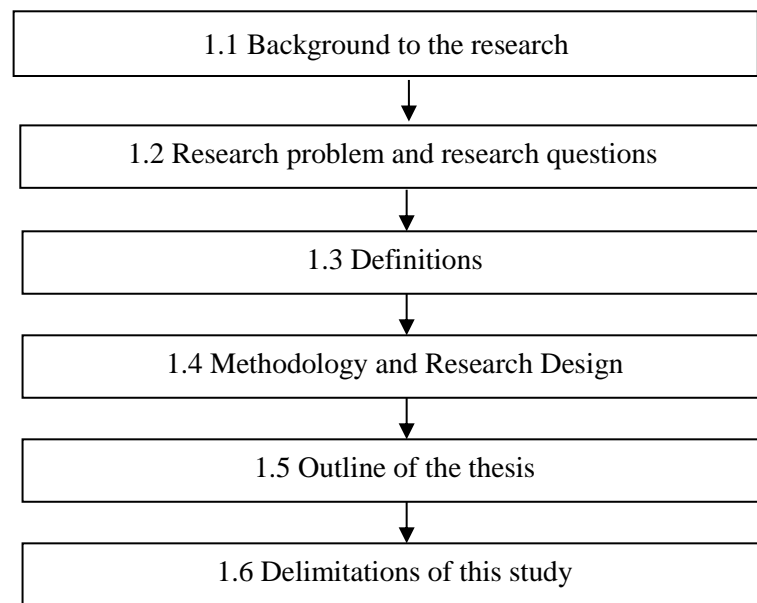


Figure 1.1: Structure of Chapter 1

Source: Developed for this research

1.1 Background to the research

The imbalance between the number of doctoral supervisors and the number of doctoral candidates is a contemporary issue of critical importance in China. The number of Chinese doctoral candidates has dramatically increased in the last almost 40 years and it will still keep increasing at least 5 percent per year in China (News of the Communist Party of China 2008). By the end of 2014, the report from The Ministry of Education of the People's Republic of China indicates that more than 70,000 new doctoral candidates enrolled, and a total of more than 300 thousand candidates were enrolled in doctoral degree programs at the same time (Ministry of Education of the People's Republic of China 2016a). Compared to other countries in the world, China has the largest population of doctoral enrolment candidates (Ministry of Education of the People's Republic of China 2016a). However, compared to the number of doctoral candidates, the number of Chinese doctoral supervisors only increases slowly. One of the reasons for the slow increase is that Chinese doctoral supervisors are initially selected from the group of Professors within the Chinese context. Even if doctoral supervisors started to select from the group of Associate Professors in 2014, the majority of doctoral candidates prefer to follow the supervisors who are experienced and well-sourced (Liu, Z 2005), which means supervisors with the higher level title, such as the title of Professor. Therefore, this situation results in that the popular supervisors are always attracting a large number of doctoral candidates in China.

Due to the high ratio of the number of doctoral students to the number of doctoral supervisors, two problems have occurred in China. One problem is that the completion rate of doctoral programs is decreasing gradually, and the other problem is that delayed graduation increases in recent years. Some academics indicated that many Chinese doctoral candidates delay completion, possibly because of ineffective research supervisors and influence from other factors relevant to doctoral supervision¹ (He 2006). There are different meanings between supervision and supervisor. Supervision is not only a one to one event (Murphy & Wibberley 2017), but also involves other members as well as communities (Cornér, Löfström & Pyhältö 2017; Halse 2011; Löfström & Pyhältö

¹ The aim of this research is focusing on supervision in the doctoral level education, instead of other areas, such as employment.

2014). Effective doctoral supervision brings many positive influences, such as effective monitoring of candidates progress (Holbrook, Bourke & Cantwell 2006; Turner 2015), guaranteeing of PhD successful and timely completion (Collins 2015; Frischer & Larsson 2000; Ismail, HM, Majid & Ismail 2013; Löfström & Pyhältö 2015, 2017; Park 2005), focusing on students' expectations (Boehe 2016; Ismail, HM, Majid & Ismail 2013), establishing trusting relationship between supervisors and students (Manathunga 2015; Marland, Lyttle & Paul 2003), reducing students' drop off (Cullen et al. 1994; Ives & Rowley 2005; Kyvik & Smeby 1994), and winning benefits for educational institutions (Vilkinas 2008). Therefore, effective doctoral supervision has become a critical issue which has been investigated by the academics in recent years.

Effective doctoral supervision is also recognised by Chinese academics, Chinese institutions and Chinese government, particularly in the new and popular disciplines. In China, the Management discipline is the largest sub-discipline of the Social Sciences (Wang, X & Song 2013). The Management discipline developed quickly, and this discipline became popular in recent years. The division of discipline in Management is different between Western countries² and China. In order to make clear to readers the relevant concepts in the Management discipline so they understand well the background of this research, I introduce the Management discipline background particularly, focusing more on the Chinese background, in this section.

1.1.1 The Management discipline in China

The Management discipline is a comprehensive interdisciplinary, including for example Finance, Business, and Human Resources, which focuses on systematically learning Management practical activities and Management theories (Yuan 2016). The core of the Management discipline is finding organisation and individual values. Chen and Liu (2007) emphasise that the Management discipline explores an organisation's procedures, knowledge and experiences for achieving the purposes of management. The procedures,

² Bonnett (2004) displayed the different boundaries, and how to distinguish 'west' and 'east'. The west has different definitions according to different indications, including: "the place where the sun goes down ensured its most ancient and enduring connotation: the west is the place of death" (p4); "being Western means being law-governed and socially and technologically advanced is relatively recent" (p5); "the West was the emergence of the USA as the central and defining Western power in the early twentieth century" (p5). Therefore, based on the above situation, I'd like to give 'western' an accurate boundary. In this thesis, I use the term 'west' or 'western' for political, cultural, and social values.

knowledge and experiences consist of planning, organisation, commendation, coordination and monitoring (试问管理学特约评论员 2007). Two principle aims of the Management discipline are to cultivate the graduates to:

- have appropriate planning, organisation, leading and monitoring abilities (Yuan 2016);
- understand how to find, allocate and use the limited resources in the organisation (Yuan 2016).

Based on these two basic purposes, the Management discipline focuses on delivering both the Management theoretical knowledge and the practical experiences (Chen, CH & Lv 2017; Cheng 2016; Wang, C 2012). Chen and Lv (2017) emphasised the importance of practice. The Management knowledge and theories are mainly refined from the practical experiences (Wang, YJ, Lu & Cui 2015).

Management is a popular discipline in China in recent years. For example: Zhu Rongji (the Prime Minister from 1997 to 2003) pointed out that the first issue in China is Management, the second issue in China is also Management, and the third issue in China still is Management (Zhang, X & Huang 2003).

The purpose of building up the Management discipline in China is exploring how to effectively reach an organisation's targets within the Chinese context (Lv 2009). The classification on the Management discipline in China has been issued on *<Degree Granting and Talent Training Course Catalogue>*³ by State Academic Degree Committee and Ministry of Education in 2011, which has not been changed compared with *<Distribution of Disciplines, Master Degrees, and Disciplines, Professional Catalogues for Training Graduate Students> (1997 Promulgation)* (Wang, X & Song 2013). The Management discipline in China includes five classifications of sub-disciplines: management science and engineering; business administration; agricultural

³ When you see something printed this way, such as *<Degree Granting and Talent Training Course Catalogue>*, that indicates a Chinese Policy or regulations' name in this thesis.

and forestry economics and management; science of public management; and science of library, information and archives (Chen, Y & Liu 2007; Wang, X & Song 2013).

The current scholars in the Management discipline are divided into two ways of thinking: ‘Theory of Chinese Management’ and ‘Chinese theory of Management’ (Lv 2011). ‘Theory of Chinese Management’ focuses more on exploring the Chinese management issues through typical Chinese methods. These scholars are interested more on Management practices in Chinese organisations; however, they are not so interested in whether these management theories and models are used in other countries. The other types of scholars focus more on testing whether the Western models in the Management discipline can apply in the Chinese context (Lv 2011).

The purpose of the research reported in this thesis is to establish a theory. “A theory is a means of organizing and integrating all that is known concerning a related set of events” (Hall & Lindzey 1978, p.13). The theory in this thesis is the influences of Chinese cultural custom, such as Confucian cultural background and *pinde* education, and policy practice of China including *huji* policy practice and the graduation relevant policy practice on the process of doctoral supervision involving in the supervisors’ responsibility, and students’ motivation. This theory is constructed by the researcher based on the analysis of evidence and relevant theoretical resources, for explaining to the readers, such as academics, education policy makers, and financial contributors who are interested in how Chinese cultural custom and policy practice impact on doctoral supervision within the specifically Chinese educational background. Two models has embedded in this theory, to explore how Chinese cultural custom and policy practice influences doctoral supervision, what Chinese doctoral supervision looks like and how Chinese doctoral supervisors supervise their candidates. In this theory, the researcher gives a reasonable and practicable of Chinese doctoral supervision, which overcomes the problems of imbalances in supply of candidates and supervisors and then provides effective and successful supervision for their candidates.

This theory, which is expected to be established in this research, looks more like a component of ‘Theory of Chinese Management’; however, the traditional Chinese culture,

particularly the Confucian cultural background, *Pinde* (品德)⁴ education, which provides the cultural focus for this study, and likewise some typical policies with respect to the *keju* (科举)⁵ policy and the graduation relevant policy, given that they are the current government policies which provide focus for this study, have influenced the development of Asian countries and possibly even some Western countries. The researcher will expect to test in future research whether this theory from this research can be used in other countries.

The main difference between the Management discipline in China and the Management discipline in Western countries, is derived from the differences of personal and social values (Lv 2011). The development of Management discipline in China emphasises two essentials. One essential is having the characteristics of China, based on Chinese traditional culture and the present situation in Chinese Management discipline. The other essential is focusing more on being conscious of the existing problems within the Chinese context (Luo 2005, 2008).

To review the history and the development of the Management discipline, Management started to become a new discipline in China (Tan 2011) later than Western countries by around 50 years (Chen, Y & Liu 2007). The development of the Management discipline in China consisted of three stages, as Table 1.1 shows.

Table 1.1: Three stages of the Management discipline in China

Three Stages	The main characteristics of this phases
1900 - 1948 The initial stage	<ul style="list-style-type: none"> • Monopoly control by imperialism; • Emphasising adopting and using Western theories in Management.
1949 – 1978 The formed stage	<ul style="list-style-type: none"> • Planned-economy, public ownership; • Adopting and using Soviet Models.

⁴ *Pinde*: named daode pinzhi, which has been abbreviated by pinde or de (He 2011; Qiu 2013; Wu, L, Wang & Zuo 2013), are an individual's stable psychological characteristics and tendencies, which are shown by a series of individual behaviours, according to the codes of conduct of social ethics and morality (He 2011). In the Chinese context, political attitudes and complying with law and legislation belong to one of the psychological characteristics. In the future, I will simply use pinyin of pinde.

⁵ *Keju*: are the series of policies and processes of selecting and preparing talented people as government officials through imperial examinations in ancient China (Huang, S 2014; Li, MZ 2016; Liu, H 2008; Zhang, C 2014). In addition, when you see the words printed this way, such as *keju*, it means Chinese pinyin. In the future, I will simply use pinyin of *keju*.

1979 – present The development and innovation stage	<ul style="list-style-type: none"> • Market economy; • Combining advanced theories in Western countries and present specific to China [<i>bentuhua</i> (本土化)⁶-Sinification].
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Source: Adapted from J Chen (2013); Tan (2011)

In contemporary China, the Management discipline emphasis is on delivery of the knowledge and experiences, which combine Western theories and present characteristics of China, and shaping the leadership. The process of combination between Western countries and current existing Chinese problems is called *bentuhua* (Sinification) in Chinese. The term of *betuhua* are used in ‘Oriental Management’ by Su Dongshui (Lv 2011).

Many Chinese scholars recognised the importance of *bentuhua* in the Management discipline within the Chinese context (Chen, CH & Lv 2017; Guo, Y 2014; Hu, Z & Chen 2013; Lv 2011; Wang, X & Song 2013). *Bentuhua* includes the *zhongguohua* (中国化⁷, and *diyuhua* (地域化)⁸ (Wang, X & Song 2013). *Zhongguohua* includes the traditional Chinese national culture, political, and Chinese social context, embedded in Chinese daily behaviours (Wang, X & Song 2013). *Diyuhua* emphasises the typical features of location and industry (Wang, X & Song 2013), which involve the present local political, economic, education policies and legislations (Chen, J 2013; Guo, Y 2014; Zhang, X & Huang 2003).

The expectation of graduates about labour market requirement will also influence the process of doctoral supervision in the Management discipline in China. The targets of the Management discipline are to cultivate the managers for the different types of Chinese enterprises, cadres’ talents for the public services for the Chinese government, and academics in the Management discipline in China (Wang, X & Song 2013). The expected graduates in the Management discipline need to have good integrated *suzhi* (素质)⁹.

⁶ In the future, I will simply use pinyin of *bentuhua*.

⁷ In the future, I will simply use pinyin of *zhongguohua*.

⁸ In the future, I will simply use pinyin of *diyuhua*.

⁹ In the future, I will simply use pinyin of *suzhi*.

Suzhi “refers to individuals’ quality, which is predetermined by biological inheritance, yet can be molded thereafter by the external environment, postnatal education and training and by practice” (Wang, MM et al. 2014, p. 159). The graduates from the Management discipline are expected to have integrated *suzhi* as the following Table 1.2 shows:

Table 1.2: The integrate *suzhi* of doctoral graduates in the Management discipline

Good abilities	agile finding problem abilities	(Wang, YJ, Lu & Cui 2015)
	solving problem ability	(Wang, YJ, Lu & Cui 2015)
	logical thinking ability	(Wang, YJ, Lu & Cui 2015)
	learning ability	(Peng, H & Xie 2017)
	leading ability	(Peng, H & Xie 2017)
	judgement ability	(Peng, H & Xie 2017)
	creativity and innovation ability	(Peng, H & Xie 2017)
Good <i>pinde</i>	caring for people	(Hu, Z & Chen 2013; Peng, H & Xie 2017)
	harmony with colleagues	(Chen, J 2013; Hu, Z & Chen 2013)

Source: Developed for this research

To sum up, Management is a popular discipline in China. According to a report in 2016, four of the top ten popular subjects belong to the Management discipline. The term of ‘Management discipline’ is semantically different in the way it is used in China and Western countries. This thesis defines the term of ‘the Management discipline’ within the Chinese context. Furthermore, compared to other disciplines, Management practical experience and theory recognised the influence from different cultures, social contexts, and present economic and political policies (Chen, CH & Lv 2017; Lv 2011). As a result, the effective doctoral supervision in the Management discipline became a highly important issue and it has been investigated more than other disciplines in China.

Literature on doctoral supervision in general is available in Western countries (Balatti & Whitehouse 2001; Boehe 2016; Erichsen, Bolliger & Halupa 2014; Green, B & Lee 1995; Guerin, Kerr & Green 2015; Johnson, D 2005; Roets 2016; Wright, Murray & Geale 2007); however, there is not much research on doctoral supervision in the Chinese context, and there is no research on the cultural custom and policy practice of China influencing doctoral supervision in China, particularly in the Management discipline. There are many differences involving backgrounds of cultures, education history, economic, geographical and government policies between Western countries and China, which may all influence doctoral supervision. Therefore, the existing theories and practical experiences may not necessarily apply successfully in the Chinese context, particularly in the Management

discipline. This research focuses on exploring how the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China.

1.2 Research problem and research questions

Based on the identified research gap mentioned above, the research problem addressed in this thesis is:

How does the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China?

In essence, I argue that the traditional Chinese cultural custom and the present government policy of China influences the whole doctoral supervision process, and that process influences the doctoral supervisors' strategies and doctoral candidates' behaviours. I also argue that the doctoral supervisors provide different training approaches for different types of doctoral candidates in the Management discipline in China. At the final stage, I will build up a *bentuhua* theory of the traditional Chinese cultural custom and policy practice influencing doctoral supervision in the Management discipline in China.

Throughout a review of the literature, three main traditional Chinese cultures and three present government policies in China impact on the doctoral supervision in three main categories including doctoral supervisors, doctoral candidates, and other factors in academic environments as Figure 1.2 shows.

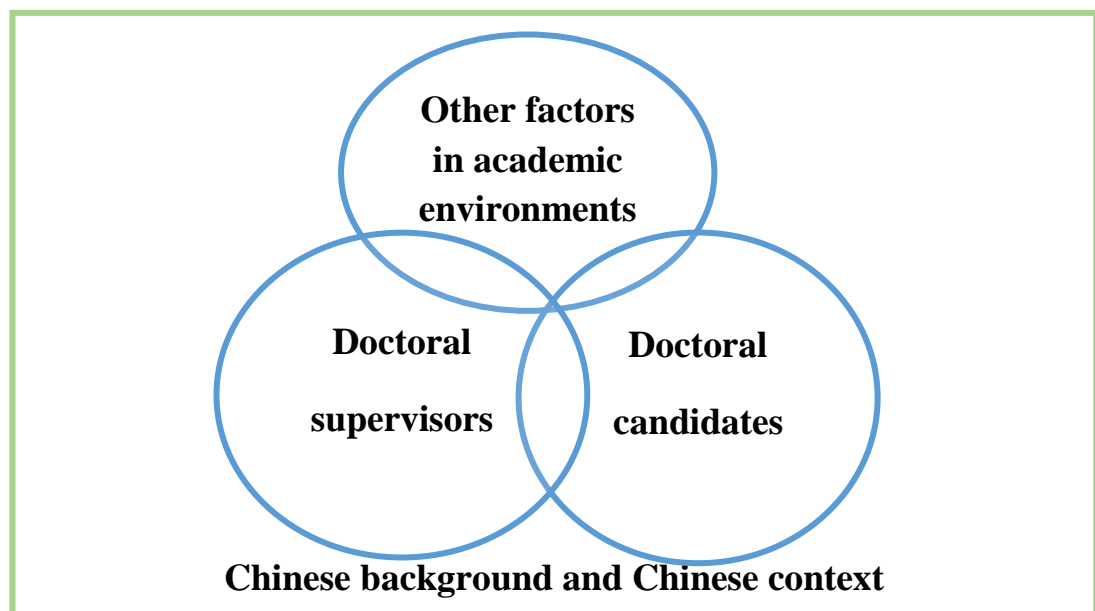


Figure 1.2: The initially assumed model of the factors influencing doctoral supervision

Source: Developed for this research

In order to detail clearly this research problem and then build up the actual theory of the cultural custom and policy practice of China influencing doctoral supervision in China, three sub-research questions have been developed from reviewing the literature to reach the objectives of this research. The three sub-research questions are:

- How does the cultural custom and policy practice of China influence the responsibility and strategy of Chinese doctoral supervisors in the Management discipline in China?
- How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on support for students' projects and individual development in the Management discipline in China?
- How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degree in the Management discipline in China?

The purpose of this research needs to achieve the following objectives:

- Building up a theory of the cultural custom and policy practice of China influencing doctoral supervision in the Management discipline in China;
- Exploring how the cultural custom and policy practice of China influences doctoral supervisors' responsibilities and strategies within the Chinese context;
- Providing effective strategies for doctoral supervisors to supervise their candidates;
- Investigating how the cultural custom and policy practice of China impacts on the daily doctoral practice, focused on both supporting students' projects and assisting individual development; and
- Discovering the ways the cultural custom and policy practice of China influence the motivation of students undertaking and continuing their doctoral degrees.

1.3 Definitions

The foremost English terms used in this thesis are defined below:

Supervision: is defined as a dynamic, facilitative, complex and unstable process (Collins 2015; Grant 2003; Watt 2016). Supervision was “not only a one to one event, occasionally it was a team approach” (Murphy & Wibberley 2017, p. 64).

Effective doctoral supervision: is

more to it than that in terms of both ‘outcomes’ and ‘outputs’...[and] ‘effectiveness’ means a high-quality submission, completion on time or as near as possible, and dissemination to the subject community; with regard to the latter, it means that the candidate has successfully developed the creative, critical and analytical skills and knowledge of a researcher and laid the basis for their future career inside, or increasingly outside, academia” (Taylor, S, Kiley & Humphrey 2018, p. 2).

Management: as a broad and practical discipline refers to the branch of knowledge which is linked with the knowledge and principle of administration (Chen, CH & Lv 2017). In China, The management discipline can be divided into five sub-disciplines. They are management science and engineering; business administration; agricultural and forestry economics and management; science of public management; and science of library, information and archival (Chen, Y & Liu 2007; Wang, X & Song 2013).

Culture: “culture is defined as a dynamic network of specific and cognitively represented shared knowledge and meanings that while activated, in an implicit or explicit manner, shape and influence individuals’ cognitions, emotions, motivations and behaviors” (Nastas 2012, p.107). Based on reviewing relevant literature, I found that two main Chinese cultural custom including Confucian culture background and *pinde* impact on people’s cognitions, motivation and behaviors during the whole process of doctoral supervision in the Chinese context. Therefore, I use these two Chinese central cultures in this thesis.

Policy: I use the central and Beijing domestic Policy which comprises *huji* policy and the graduation relevant policy, particular in Beijing, because all my interviewees were from a university located in Beijing.

Confucianism: was created by Confucius (551-479B.C) and Confucianism is the cornerstone of the traditional Chinese culture and basic social value system (Lin 2016). The core of Confucianism, which is regarded as a prototype of contemporary *pinde*,

includes “benevolence, righteousness, rationality, wisdom, and faith” (Baiké 2018a)¹⁰. Some scholars indicated that the foundation of the Confucianism could be summarized to ‘Three Principles and Five Virtues’, after the Han Dynasty (Wei & Peng 2014).

The Chinese terms of knowledge used in this thesis have been defined in the Glossing (please see page xix).

1.4 Methodology and Research Design

This section presents an overview of the general research methodology and research design which guided data collection and data analysis in this research. The purpose of this study is to establish a theory of the cultural custom and policy practice of China influencing doctoral supervision in the Management discipline in China. The qualitative method is used in this research because this research emphasis develops a theory rather than the measurement of a theory. This research focuses on finding the particular details involving how the cultural custom and policy practice of China influence doctoral supervision within the Chinese context, and so case study is adopted. Based on this situation, the research usually examined and refined the theory throughout a single case rather than using the large population.

Face to face, one-to-one, semi-structured interviews were used in this study for the following reasons. Firstly, the target of this research is to explore a model: one-to-one in-depth interview is convenient for participants to provide rich and deep information for development of a theory. Secondly, face to face interviews provide more opportunities for the researcher to control the conditions and correct the misunderstanding throughout the interview by observing the participants’ behaviour (Yin 2009). Thirdly, due to time, energy and cost limitations, the semi-structured, one-to-one interviews make the interview procedure more convenient and cost-effective for the researcher (Bryman & Bell 2007).

¹⁰ There is plenty of Chinese literature on Confucianism. When these Chinese literatures have been translated into English, the main characteristics of the core of Confucianism are shown in different terms. In this research, I cited the five characteristics, which has been used to briefly introduce the core contents of Confucianism, from the website of Baiké (2018a).

All interviewees were selected from a leading Chinese university (The University's name has been replaced by a/the/this Case University in this research for confidentiality) which had four characteristics. Firstly, the Case University has the qualification to award the doctoral degree in Management, and has abundant funding. Secondly, this university contains several famous doctoral supervisors in Management. Thirdly, this university is regarded as a well-developed example for leading the way for other universities in China. Within the Chinese context, there are some famous universities that can be good examples for other universities. Finally, compared to other famous Chinese universities, this Case University is famous in the Management discipline. Therefore, I collected the data from this university.

In total, thirty-nine interviewees, who worked or studied in this university, participated in this study. Ethical considerations were adopted during the whole procedure to avoid false reporting or unethical behaviours which could result in participants' psychological harm (Zikmund 2003). The one-single case analysis with the Nvivo 10.0 software assistance is used in this research for establishing the theory of the cultural custom and policy practice of China influencing doctoral supervision in the Management discipline in China.

1.5 Outline of the thesis

This thesis includes eight chapters. The structure of this research is outlined in Figure 1.3.

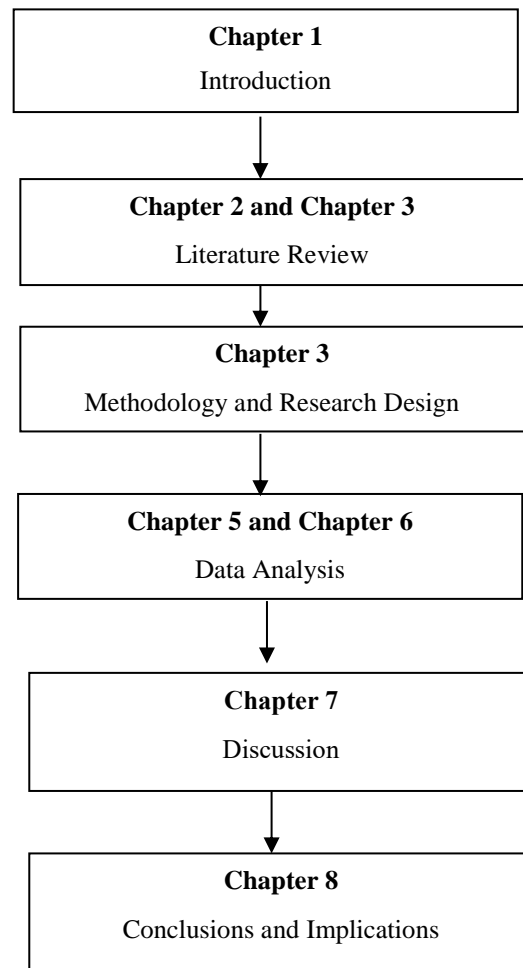


Figure 1.3: Chapters of this thesis

Source: Developed for this research

Chapter One : Introduction provides a brief introduction about the background of the research problem: *the cultural custom and policy practice of China influencing doctoral supervision in the Management discipline in China*. As outlined in Chapter 1, the targets of this research are:

- to build up a theory to explore how the cultural custom and policy practice of China are embedded in the doctoral supervision in the Management discipline in the Chinese context.
- to refine a model of doctoral supervision in the Management discipline in China.
- to demonstrate to readers, such as academics, education policy makers and financial contributors, who are interested in Chinese doctoral supervision and Chinese culture or who work with Chinese academics, how supervisors supervise

doctoral students within the influence of Chinese cultural custom and policy practice on doctoral supervision in the Management discipline in China. For example, according to the Chinese government report, until the end of 2017, more than 608.4 thousands students studied abroad (The State Council of The People's Republic of China 2018). Facing the large number of Chinese international students, this research could assist academics working in Western countries to understand what the behaviours of candidates and colleagues who were from China looked like and why they made decisions by their thinking ways. In addition, the Western academic could also learn how to provide assistance to benefit Chinese graduates' career paths when they went back to China.

- to show the similarities and differences relating to doctoral supervision between Western countries and China.
- to provide some solutions and perhaps effective approaches to benefit doctoral supervision for both doctoral supervisors and students in the Management discipline in China.

Chapter Two : Literature Review - Chinese background and doctoral education

presents the literature regarding Chinese background and doctoral education. The chapter begins with an overview of the Chinese background and context, especially on the history of traditional education in the imperial examination system (*keju*), the development and history of education in China involving the Confucian cultural background, policies involved with the economic background and the geographic background, and government policy, including *huji*(户籍)¹¹ policy and the graduation relevant policy, relevant to higher education within the Chinese education. The chapter then reviews literature on doctoral education in the Chinese context including historical background, the nature of Chinese

¹¹ *Huji* policy: is an administration policy for the Chinese population. The Chinese *huji* policy has two main functions. One function is that the departments of Chinese government collect, register and confirm the citizens' basic information, according to the requirements of relevant constitutions and provisions (Liu, L 2014; Tao & Wang 2014). The other function of the *huji* policy links a series of social and welfare policies regarding migration within China (Hu, X 2014; Tao & Wang 2014). In the future, I will simply use pinyin of *huji*.

doctoral degrees, doctoral candidates in contemporary China and doctoral supervisors in China.

Chapter Three: Literature Review - Doctoral Supervision overviews the literature on doctoral supervision. The chapter comments on supervision from the Western literature and then reviews three principle factors: the factors related to doctoral supervisors, the factors related to doctoral students, and factors related to others in academic environment. A research gap is found in the literature in doctoral supervision in the Management discipline in the Chinese context. The research problem is stated: *How does the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China?* Three research questions were developed to answer the research problem, as outline above.

Chapter Four: Research methodology and research design outlines that qualitative research and case study are used in this research. Thirty-nine face to face semi-structured interviews, collected from one of China's leading universities, are used to provide data for analysis in this research to answer the research questions. The 39 interviewees are selected from three groups including doctoral supervisors, doctoral graduates and doctoral students who worked in the Management field in a leading Chinese university. Chapter 4 also describes the case context the design of the interview questions design, ethical consideration, and data storage. Finally, results on demographic analysis are presented in this chapter.

Chapter Five and Chapter Six: Data analysis discuss the detailed results of data analysis. The researcher adopted Nvivo software revision 10.0 to sort the data based on three groups of interviewees: doctoral students, doctoral graduates particularly postdoctoral fellows, and doctoral supervisors. The analysis results are displayed by four components. Chapter 5 shows one of the components: the detailed results regarding daily doctoral practices including group education and *pinde* education. Chapter 6 discusses the other three components: the detailed results regarding the influences involved in the factors related to supervisors; the factors related to doctoral students; and the support from other academic environments.

Chapter Seven: Discussion addresses the understanding of how the cultural custom and policy practice of China influence the doctoral supervision in the Management discipline in China arising from the results from Chapter 5 and Chapter 6. Three sub-questions are used to answer the research problem in this chapter.

Chapter Eight: Conclusion presents the conclusions for whole thesis, and the implication for theory, policy and practice. The final section of this chapter shows the limitations and implications for the future research.

1.6 Delimitations of this study

This section briefly introduces the limitation and possible further research in this study. This thesis is limited to the participants who work or study in a leading Chinese university in Beijing. Due to this limitation, even if this leading Chinese university is a well-developed example for leading the way for all other kinds of levels' universities in China, the finding from this study may still not be valid to apply to other levels' universities in China.

Furthermore, this study focuses only in the Management discipline instead of all types of disciplines in China. The theories and practical principles from the Management discipline need to embed in the Chinese culture, social context and current government and social policies. Although Management is regarded as across disciplines, this theory summarized from these results and conclusions may be not suitable for other disciplines or in other countries.

In addition, this research discovers the results involved in the doctoral supervision factors only focusing on three parts: factors related to doctoral supervisors, factors related to doctoral students, and the other factors in the academic environment. There may be other factors involved in the doctoral supervision; however, this study focusses only on the factors which are more easily applied by doctoral supervisors.

Chapter 8 shows that this research could be further developed. Further research may test whether this theory can be used in other levels of Chinese universities, in different disciplines, or in different countries. In order to understand well the background, Chapter 2 introduces the literature on Chinese background and context.

Chapter 2:

Literature Review - Chinese Context and Doctoral Education in the Chinese Context

Chapter 1 presented the background of this research, outlined the research problem, the research questions, and briefly described the methodology and the research design. The outline of this thesis, key definitions, and the limitation and further possible research were shown. This chapter, as Figure 2.1 shows, reviews the literature related to the Chinese background that provides the context for the research, and doctoral education in the Chinese context.

This chapter gives the big picture of the Chinese background and context, which have been embedded in the Chinese education system and which impact on the Chinese higher education, particularly contemporary doctoral education. After I reviewed the literature, I found the five main aspects: the *keju* system which is one of the traditional education and imperial examination systems in China; the development and history of education within the Chinese context, which consists of a brief introduction to Confucian culture, *pinde* education, and the development of higher education institutions in China; economic background; geographic background; and the government policies, such as *hujia* policy and the graduation relevant policies, which closely link with the contemporary higher education system in China. *Hujia* policy, also named as a ‘registration policy’, is a kind of Chinese government administration policy for controlling the distribution of population in different areas. It is a series of policies involving social, welfare, and education policies established based on the *hujia* policy or strongly linked with the *hujia* policy. Within the Chinese mind, particularly full-time graduates, the graduation process connects closely with the whole process of finding jobs, the process of changing *hujia* and gaining relevant social and welfare entitlements. That is to say, within the present Chinese context, this series of graduation processes linked with both the graduation, further career paths, and their family fates.

As Figure 2.1 shows, this chapter then introduces the doctoral education within the Chinese context, which includes four main sections: the historical background in doctoral education which started later than in Western countries; the nature of Chinese doctoral

degrees involving discipline classification in China, the process of doctoral candidates' selection, studying and examination; doctoral candidates in contemporary China; and Chinese doctoral supervisors.

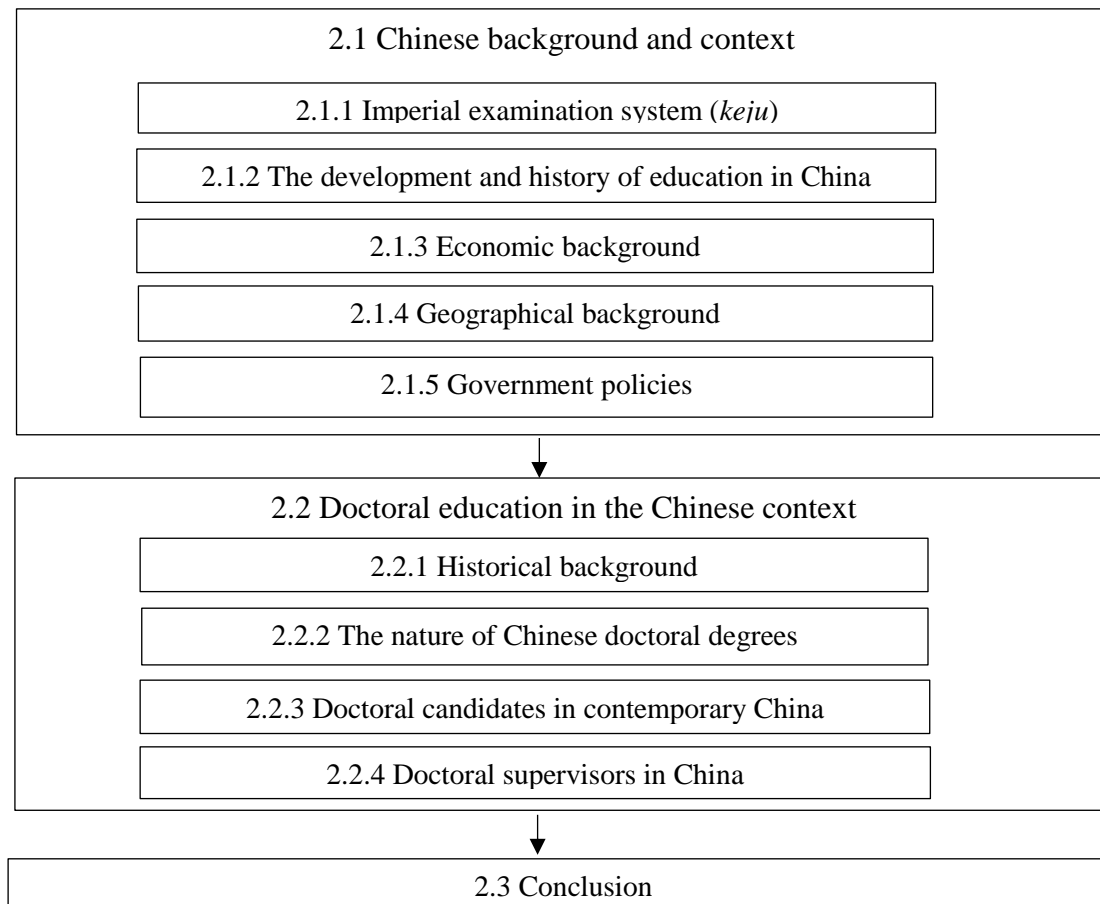


Figure 2.1: Structure of Chapter 2

Source: Developed for this research

2.1 Chinese background and context

Understanding briefly the Chinese background and context of higher education can easily guide readers to learn about how the cultural custom and policy practice of China influence Chinese doctoral education and Chinese doctoral supervision. Through reviewing the relevant literature, I introduced five main aspects of Chinese background which play important roles impacting the Chinese education system. The five main aspects of the Chinese background are: the history of traditional education in the imperial examination system (*keju*), the development and history of Chinese education, the

economic background, the geographic background, and the government policy on higher education within the Chinese context.

2.1.1 The history of traditional education in the imperial examination system (*keju*) in China

The traditional education in the imperial examination system (named *keju*) of China plays a vital role in influencing Chinese contemporary education values and education forms. For example, the graduates who have no any working experiences, but hold the higher level degrees normally have priority opportunity to gain the job offers in the higher level at public service and then obtain more relevant entitlement in current China (Please see Section 2.1.5). Although most literature of *keju* has been translated into English as ‘imperial examinations system’ (Liu, H 2008), when the words ‘imperial examination system’ in English are translated back to Chinese, the meaning is hard to differentiate in Chinese words between *keju* (科举) and ‘examination system’ (Liu, H 2008). Therefore, in order to avoid the confusion, I use the word *keju* in this research.

Keju were the series of policies and processes of selecting and preparing talented people of government officials through imperial examinations in ancient China (Huang, S 2014; Li, MZ 2016; Liu, H 2008; Zhang, C 2014). This examination system established in the Sui Dynasty in 605 (Li, C & Deng 2013), lasted 1,300 years which was almost throughout the whole traditional society in China (Feng 2015; Huang, S 2014; Li, F 2008; Ma, J 2013).

Although *keju* no longer exists, as the longest used policy and examination system, it influenced the intelligentsia’s fate including their thinking ways, fortune and cultural beliefs in China (Liu, H 2005). Therefore, this system has strongly influenced many aspects of current education values, social values, education contexts, education forms, and the functions of education institutions in China (Huang, J 2013; Huang, S 2014; Zhu, L & Zhang 2016).

First, *Keju* creates the close relationships between studying, examinations, and securing an official position in China (Li, F 2008; Li, F 2016). Within the hereditary system in ancient China, it was hard to change a person’s class (Zhu, L & Zhang 2016). In ancient

China, referring to the different careers and individual identities, the people were divided into upper nine class streams, central nine streams, and the next (lower) nine streams (Qian 2014). The upper nine social streams from the highest to lowest ranking were: Buddha, Jade Emperor, Emperors, and different classes of officials and soldiers; the central nine streams were different types of technological artisans and monks; and the next (lower) nine streams were merchants (Qian 2014). *Keju* was the only effective approach to provide opportunities for the Intellectuals who were in a lower class, to move to a higher, predominant class, which meant being government officers (Hu, X 2012; Zou, H 2009). Under this situation, during the *keju* period, the meaning of passing the examination through studying equalled securing an official position in China (Huang, L 2005). There is a famous Chinese proverb: a decade of diligent study merely for passing the examination for being a government official. This point of view emphasises that the ideal of most people was being an official. The class of government officers was higher than other classes such as farmers, workers, businessmen (Hu, X 2012). These opinions were accepted and endured by the masses at that time in China (Hu, X 2012). Based on the influence from *keju*, studying became the best tool to change people's fates. Although studying may increase the family economic burden, studying is still supported by Chinese, and most Chinese families try their best to support their children in study (Li, C & Deng 2013; Wang, F 2016). Successfully passing the *keju* is regarded as an honour for the whole family members, because it is a result through the whole family members' efforts (Wang, F 2016).

Furthermore, in ancient China, being a government official meant not only to obtain an important political position; the people who held an official position were also expected to gain special rights (prerogatives) (Huang, L 2005) and extra (illegal) income. The higher the position people had, the more special rights and the higher individual wealth they obtained (Liu, Q 2009; Wang, F 2016). Therefore, studying and then passing the imperial examination meant to change people's fate in both political class and financial status within the traditional Chinese context. Some scholars indicated the issue of corruption in higher education system (Kresse 2017; Shore 2018), particularly academic corruption in Chinese higher education in recent year (Ren, 2012; Yang, R 2015), and I will introduce the relevant context of universities' corruption in Section 2.1.2.

Secondly, due to the core content of the *keju* examination concentrating on Confucianism, the targets of traditional education institutions were supporting and storing talents for government *keju* in ancient China (Hu, X 2012). The Chinese traditional education institutions provided the teaching focus on Confucianism cultural classics, such as ‘Four Books’, ‘Five Classics’ (Lu & Ni 2016), Confucius and Mencius culture (Liu, Q 2009; Zhu, L & Zhang 2016), and paid much attention to harmonious relationships, and emphasizing *pinde* (Zhang, Y 2002). This detailed Chinese tradition is introduced in Section 2.1.2. Therefore, Confucianism had the vital position in the Chinese mind and Confucian values still influence the current Chinese behaviours and social values.

Although *keju* has been abolished since the late Qing Dynasty in 1905, and this policy no longer exists, it has influenced the current Chinese social values (Confucianism values), contemporary Chinese education, and present policies in China, such as *huji* policy and the graduation relevant policy, which are introduced in Section 2.1.5.

2.1.2 The development and history of education in China – Confucian cultural background

The traditional educational system, particularly the Confucian cultural background, has influenced the modern doctoral educational system within the Chinese context. For example, the ‘Five Virtues’, which is explained later in this section, are still promoted in contemporary China (Li 2016). Although the development of Chinese modern education followed models from American and European systems (Qiang 1996), the traditional education, particularly Confucianism and Confucian ideology, influenced a lot the modern doctoral education in China. Confucianism is described in both different ways: “a way of life or as a traditional system of values” (Yao 2000, p. 4). Confucianism was created by Confucius (551-479B.C) and then developed by 3,000 Confucius’ disciples, and has been divided into eight factions. Confucius had 72 brilliant students, such as Mencius and Xun Zi who had strong contributions to the development of Confucianism. Confucius “is usually regarded as a ‘sage-teacher’ for the people or as the Sage for Confucians” (Yao 2000, p.17). Confucianism has lasted more than two thousand years, because it is the cornerstone of the traditional Chinese culture and basic social value system (Lin 2016).

Confucianism, developed to *pinde*¹² in contemporary China, runs through three main education phases as outlined below. Therefore Confucian culture and then *pinde* ideology, which are regarded as the fundamental principles of society and government, influence people's behaviours in contemporary China (Durdent & Yang 2006).

Higher education can be seen as composed of three main phases: classical phase (from the early Eastern Zhou Dynasty (771 -221 before Christ (B.C.) to 1949); a transitional phase (from 1949 to 1976); and a booming phase (from 1977 to nowadays) (Brandenburg & Zhu 2007).

Enlightened and traditional Chinese higher institutions commenced early in the Eastern Zhou Dynasty (771-221 B.C.) (Hayhoe 1989). The curriculum was replaced by 'Four Books' and 'Five Classics' during the 'warring states period'. This education model was initiated by Confucius, and was continued until the middle of 19th century (Brandenburg & Zhu 2007; Durdent & Yang 2006). The core of Confucianism, which is regarded as a prototype of contemporary *pinde*, could be summarized to 'Three Principles and Five Virtues', after the Han Dynasty (Lin 2016; Wei & Peng 2014). 'Three Principles' shows the three ethical relations in the ancient China: "ruler guides subject; father guides son; and husband guides wife" (Fu 1997, p.81). 'Five Virtues' are the ethical concepts including "benevolence, righteousness, rationality, wisdom, faith" (Baiké 2018a)¹³. Some scholars also emphasises other characteristics, such as loyalty, filial piety and forgiveness (Lin 2016; Wei & Peng 2014). The original of benevolence is compassion which is derived from a hidden heart (Tang & Yu 2015). Righteousness is commonly used to express friendship and harmonious relationships; the narrow definition righteousness is loyalty (Lin 2016; Tang & Yu 2015). Rationality emphasises that people should abide by the rules. For example, the youngers should respect the elders; the lower position people should respect the higher (Tang & Yu 2015; Wei & Peng 2014). In China, wisdom is considered as a comprehensive individual attribute involving modesty, rigours, flexibility,

¹² *Pinde* will be introduced later in Section 2.1.2 under the heading of *pinde* education-Confucianism cultural background.

¹³ As mentioned above, in this research, I cited the five main characteristics, which has been used to briefly introduce the core contents of Confucianism, from the website of Baiké (2018a).

diligence and optimism (Liu, J 2017). Faith means honesty, without hypocrisy (Tang & Yu 2015).

In 1949, the People's Republic of China came into existence. With the help and participation of educational experts from the Soviet Union, Chinese education entered the second phase: the transitional phase (Brandenburg & Zhu 2007; Chen, H 2003). A "mixed Confucian-Western style" of higher education was established and applied in Chinese higher education during this period (Finnish National Board of Education 2007). As a result, a series of changes occurred. For example:

- Discipline-specific study was emphasised (Lang & Zha 2004) and "modern scientific and technical accomplishments" (Hayhoe 1989, p. 68);
- The departments involved in cross-disciplinary research, Humanities and Social Sciences were rapidly reduced (Brandenburg & Zhu 2007).

Although many changes occurred during this period, *pinde* education was regarded as a main component in the education system. As Mao Zedong indicated, education should be able to focus on three core items: *de* (The abbreviation of *pinde*), intellectual, and physical (Hayhoe 1989). These were regarded as the main basis for talent evaluation in China during the transitional phase. Formal education then stopped for more than ten years due to the Cultural Revolution, which began in 1966 (Guo, Z & Beatrice 2008; Lou 2008).

The third phase of Chinese higher education, the booming phase, commenced in 1977. Since then, the importance of higher education, especially at postgraduate level, has been highly recognised by the government and the Chinese Communist Party (CCP). In 1978, with the revival of higher education after a 12 year break, 10,000 out of 62,000 applicants obtained a permit to enter further education in university via a strict entrance process, including sitting for examinations and interviews (Ministry of Education of the People's Republic of China 2009a). The increased demand for higher education from government, industry and academia has led to a dramatic increase in student numbers since 1978, especially postgraduates (Ministry of Education of the People's Republic of China 2009a). By the end of 2016, the total number of postgraduate students enrolled had reached 1,981,051 (Ministry of Education of the People's Republic of China 2017a).

Accompanying the postgraduate education's rapid development, *pinde* education has been paid much attention in this phase, due to the influence from traditional Chinese culture, and Confucianism ideology (Li, Z & Li 2014; Peng, M 2011). The criteria regarding talent evaluation in the 21st Century have been expanded to focus on five aspects: *de*, intelligence, body strength, beauty, and work. *De* emphasised that people should have the good *pinde* and social values. Intelligence means that people should systematically master the relevant knowledge and skills. Body strength means that students should have strong physical attributes. Beauty means that people should have the correct aesthetic sensibility. Work means that people should master the technical abilities and they need to love to work (Baik 2017b). Of these, *pinde* is the most important aspect to evaluate people in Chinese society (Li, Z & Li 2014; Peng, M 2011; Qiu 2013).

***Pinde* education – Confucianism cultural background**

The above review shows that *pinde* has been recognised as a necessary educational attribute in every educational phase in China. Since 1995, the training targets of Chinese university for the graduates focuses on having four main aspects: a noble dream, good *pinde*, be civilized and law abiding (Qiu 2013). Of these, the most significant item is having good *pinde* (Cai 2005; Li, D & Huang 2013). Zhang & Yang (2003) strongly supported this view, and they further pointed out the two main functions of education by university. One is knowledge delivery (intelligence education), which is recognised as a hard-target, and the other function is *pinde* education which is regarded as a soft-target (Zhang, W & Yang 2003). This appears to have impacted on the development of doctoral education and influenced doctoral supervision in contemporary China. This section introduces the definition and the development of *pinde*.

Many scholars provide definitions of *pinde*. For example, *pinde*, named *daode pinzhi*, which has been abbreviated by *pinde* or *de* (He 2011; Qiu 2013; Wu, L, Wang & Zuo 2013), are an individual's stable psychological characteristics and tendencies, which are shown by a series of individual behaviours, according to the codes of conduct of social ethics and morality (He 2011). The occurrence and development of *pinde* are restricted by both social context and the development of individual physiology and psychology (Xiao 2008). In my opinion, the definition of *pinde* is reflecting your individual traits in

relation to how you conduct yourself within the existing social ethics and morality in China.

Some researchers recognised that academic corruption, which included “fraud, plagiarism, cheating, favouritism, project monopolization and other such behaviour” (Ren 2012, p.19) became a significant issue and that it increased the risk of collapsing the reputation of the Chinese higher education system in China (Ren 2012; Yang, R 2015). Shore (2018) argued that the way to remedy corruption is to improve the ethics and morality. Ren (2012, p.36) further emphasized that “there is no quick fix for fighting academic corruption, nor will it be easy to raise the level of academic ethic; this is a long-term project for China... “it will take a long time to build up a culture of honouring academic ethics”. Throughout reviewing Chinese literature on the higher education, I found that academic ethics, which I used as *pinde* in this thesis, have been strongly recognised in all areas in China.

Having good *pinde* is praised highly in the Chinese context. De has long historic development since The Spring and Autumn Period (256 B.C.) (Liang, J 2007). Zuo (2015) indicated that people with good *pinde* contributed to the prosperity of a nation. Due to the influence of the traditional Confucian culture, most Chinese recognise the importance of good *pinde*. A person, whether a civilian or an emperor, needs to pay much attention to improving individual *pinde* (Liang, J 2007). *Pinde* has also been recognised in present China. Previous Prime Minister Hu Jintao indicated that employees’ *pinde* and abilities should be considered as one of the basic requirements when employers selected their employees (The Theory Department of People’s Daily 2009). In the National Organisation Conference in 2008, he further stated that the *pinde* should be considered as more important than other abilities (The Theory Department of People’s Daily 2009). The current Prime Minister Xi Jinping agreed with this view, and he also emphasised that *pinde* is the most important thing to be considered in the process of the selection criteria of cadres and employment (People 2015; Zhang, LJ 2015).

In fact, *pinde* is used as a significant criterion of employment positions in different fields in China. There is a popular suggestion on how to use four types of people, including Wiseman, Gentleman, Fool, and Villain, as Table 2.1 shows.

Table 2.1: Four types of people

Types of people	What do they look like	How to use this type of people
Wiseman	Has good <i>pinde</i> , Has excellent ability	Put in an important position
Gentleman	Has good <i>pinde</i> , Has not enough ability	Needs to be trained first; Then put in an appropriate position
Fool	Has not good <i>pinde</i> , Has not enough ability	May be used as a Dummy. These people cannot complete things excellently, also they cannot bring negative influence. So using this kind of person is better than using Villain,
Villain	Has bad <i>pinde</i> , Has outstanding ability	Do not use this kind of person or, use this kind of people very carefully, because they have enough abilities to bring negative influences

Source: Adapted from Fang (2010); Si (959)¹⁴

Similarly, *pinde* education has been significantly recognised and carried out across the whole doctoral supervision within the Chinese context. Chapter 3 will introduce more information how *pinde* education occurs in doctoral supervision.

The development of higher education institutions in China

Educational institutions provide students with access to lecturers and lectures. Higher ranking educational institutions, higher quality services and more research funds have been offered to students. Before focusing on doctoral education and supervision, I will first look at the general development of Chinese higher education institutions.

The first formal national higher education institution, the capital university, later renamed Peking University (PKU), was established in China in 1898 (Shih 1953). By 1912 (the first year of the republic), four universities and 111 independent colleges and specialized institutes had been established with 40,114 formally enrolled students (one in ten thousand of the population) (Shih 1953). In the last 30 years, the number of institutions increased rapidly. Until the end of 2013, 2,491 institutions provided bachelor degree-level programs, and 830 higher education institutions had programs for training postgraduates. According to different funding and different main purposes, the postgraduate programs can be classified into three types, as Table 2.2 shows (National Bureaus of Statistics of the People's Republic of China 2015a).

¹⁴ I translated this context from Chinese to English.

Table 2.2: The number of higher education institutions offering postgraduate programs in China in 2014

Total No. of higher education institutions for postgraduates	Funded by Central ministries and agencies		Funded by Local Authorities		Funded by private institutions
	Central ministries	Other Ministries	Regular higher education institutions	Other institutes	
830	73	275	412	65	5

Source: Adapted from National Bureaus of Statistics of the People's Republic of China (2015a)

The Ministry of Education of People's Republic of China (MOE) and the Quality Assurance Association have taken steps to assess the quality of higher education in China. Chinese universities are divided into Project 985 and Project 211 by ranking universities in terms of performance (Zhang, H, Patton & Kenney 2013).

Project 985 was initiated by Jiang Zemin, the Prime Minister, in 1998. The purpose of this project was to develop world-class universities, which have the ability to compete with world famous universities and which are research intensive (Brandenburg & Zhu 2007; Luo 2008; Ministry of Education of the People's Republic of China 2009b). There were nine initial universities in the Project 985, and then by 2013, there were 39 university listed in the Project 985 (Ministry of Education of the People's Republic of China 2015b). According to the statistics by QS top universities in 2015, the top 10 Chinese universities with high reputation, which all belong to Project 985, are PKU, Tsinghua University, Fudan University, Shanghai Jiao Tong University, University of Science and Technology of China, Nanjing University, Beijing Normal University, Zhejiang University, Wuhan University, and Sun Yat-Sen University (QS top universities 2015).

Project 211 was introduced in 1990 to assist China's economic development. The aim was to establish at least 100 universities which focused on the core disciplines during the 21st century in China (Brandenburg & Zhu 2007; Department of International Cooperation and Exchanges Ministry of Education 1999; Lou 2008). The number of Project 211 universities has increased to 112 by the end of 2015 (Ministry of Education of the People's Republic of China 2015a).

As this research aims to explore how the cultural custom and policy practice of China influence effective Chinese doctoral supervision, it will focus on Chinese universities

classed as top-ranking universities. The reason for this is that these universities have more abundant academic staff with greater experience and high reputation, substantial funding and a strong academic environment, which should enable them to use effective approaches for training doctoral candidates. The criteria for choosing research universities are further explained in Chapter 4¹⁵ of methodology and research design.

2.1.3 Economic background

The drive to develop the economy has been a major factor influencing the development of Chinese higher education, the background of doctoral education and doctoral supervision. The continuing immense changes in the economy and society have transformed higher education, especially postgraduate education (Guo, Z & Beatrice 2008). According to statistics regarding world GDP ranking by Knoema, China had developed into the second-largest economy in the world following the US and the GDP reached \$11,385 billion (AUD in December in 2015) (Knoema 2015).

Since the open-door policies, education reform has become a particularly crucial component for economic reform in China (Brandenburg & Zhu 2007; Guo, L & Ye 2008). In order to effectively continue this policy, expansion of the sector will continue at least until 2020, whether aimed at undergraduate education or postgraduate education (Ding 2004; Ngok 2008). Accompanying the performance of this expansion policy in recent years, in order to control the graduate quality, the number of new students in universities will be controlled by the Chinese government to keep increasing 5 percent per year (News of the Communist Party of China 2008). Then by 2020, the number of enrolled students in higher education will be expected to top 33 million (Ding 2004). In fact, the number of enrolled students in higher education have exceeded the predicted quota. According to the report from The State Council of The People's Republic of China in 2017, until the end of 2015, more than 36 million students enrolled in higher education in China. At the same time, 1.91 million full-time students, which exceed the predicted targets (1.7 million

¹⁵ According to the world ranking depending on subjects, only some out of ten top universities in China in 2015 have Management subjects. And then only several universities' ranking are listed in top 100 world ranking in the subject of management discipline (QS 2015). (<http://www.topuniversities.com/university-rankings-articles/brics-rankings/top-10-universities-china-2015>)

students) enrolled in postgraduate programs until 2015 (The State Council The People's Republic of China 2017). Therefore, based on this situation, this report indicated in the new education by 2020, the number of enrolled students in postgraduate program will be expected to be over 29 million instead of the original plan of 23 million (The State Council The People's Republic of China 2017).

The government of the Peoples' Republic of China had made investments in research and development to enhance the level of education in general to support the successful achievement of the goals. The average annual growth rate of government expenditure on research and development increased by 22.5 percent each year from 2001 to 2007. The data from National Bureau of Statistics of the People's Republic of China (NBS) showed that the investment in education kept increasing. From January to August in 2015, the education investment increased to 464.8 billion Yuan (approximately 99.7 billion Australian dollars), which has been increased by 16.6 percent investment compared with 2014 (National Bureaus of Statistics of the People's Republic of China 2015b). The State Council of The People's Republic of China (2017) emphasised that the government would provide the long-term funding support for the higher education. Although the Chinese government had provide many investments in education, Jiang et al. (2017, p531) based on their study indicated that "Doctoral funding shortage in colleges leads to outdated scientific equipment in use and lack of liberal books, thus greatly affecting the quality of doctoral education". Jiang et al. (2017) futher emphasised the necessary of increasing the investments of Chinese doctoral education for ensuring the graduates' quality. However, on the issue of Chinese government's investments, particularly for the broad cooperation program, Zhu et al. (2017) stated when the majority of doctoral candidates studied aboard, they were self-funded, instead of requesting financial support from the Chinese government.

2.1.4 Geographical background

Geography is another factor which appears to impact on the distribution of higher educational institutions. China is the third largest country in the world, with an area of over 9.6 million square kilometres (Central Intelligence Agency 2007). It is usually divided into three geographical sections: East China, Middle China, and West China. The majority of the population (more than 90 percent) and the main education institutions are

concentrated in the cities that are located in Middle China and East China. For example, the main higher education institutions and the Professors are centred in ten cities: Beijing, Guangdong, Hubei, Shandong, Hebei, Liaoning, Sichuan, Shanxi, Zhejiang and Shanghai (National Bureaus of Statistics of the People's Republic of China 2015a).

Beijing, as a centre of culture, politics and economy in China, has the most higher education institutions, with approximately one-fifth (more than 100) of these institutions having a right to confer doctoral degrees (Lou 2008). Furthermore, in 2013, Beijing has the biggest population (16,611) of university lecturers with the title of Professors (National Bureaus of Statistics of the People's Republic of China 2015a). Although the Chinese government recognised the need to improve the education quality in West China and in Middle China, the focal point of education focuses on the stages of early childhood education, primary education and secondary education (The State Council of The People's Republic of China 2017).

2.1.5 Government policy relevant to higher education

This section provides *huji policy* and *the graduation relevant policy*. These two types of policies directly influence the development trend of doctoral education, and impact on both academics' cultivation methods and candidates' outputs and career paths. For example, *huji Policy* resulted in many people commencing their postgraduate education, and sometimes the graduation relevant policy increased the pressure of employment, which push more graduates to continue to do the further level education to reduce this pressure.

Huji Policy

Government policies stimulate educational development throughout many countries in the world. *Huji* policy (also named registration policy) is one of the policies in recent years to motivate people to start their higher education, particularly a doctoral degree.

Huji policy is an administration policy for the Chinese population. China's present *huji* policy grows out of the previous *keju* policy and the strong Confucianism values. The Chinese *huji* policy has two main functions. One function is that the departments of Chinese government collect, register and confirm the citizens' basic information, according to the requirements of relevant constitutions and provisions (Liu, L 2014; Tao

& Wang 2014). The other function of the *huj*i policy links a series of social and welfare policies regarding migration within China (Hu, X 2014; Tao & Wang 2014).

The initial purpose of formulating this policy was promoting the transformation from ‘agricultural country’ to ‘industrial country’ (Bie 2014). Chinese citizens are divided into two types of *huj*i accounts: ‘agricultural householder’ and ‘non-agricultural householder’ in each city (Cha 2005; Wang, Q 2014). A person who provides food for their family from their resident farmland is labelled ‘agricultural householder’ (or farmer). A holder with ‘non-agricultural householder’ account is an urban resident (or city dweller), and his/her food rations are distributed by the nation (Liang, S 2016). Newborn babies obtain automatically their *huj*i referring to their parents’ *huj*i accounts and *huj*i place (公安部治安管理局 2009).

Accompanying the establishment of *huj*i policy, the administration system and construction of infrastructure built up referring to the different areas between rural and urban. Due to the difference of developmental progress between rural and urban, people with ‘non-agricultural householder’ accounts gain more rights than ‘agricultural householder’ in current China (Cha 2005; Chen, H 2012; Chen, Z, Lu & Xu 2014; Du, X 2011; Huang, Z 2012; Liu, L 2014; Tao & Wang 2014; Wan, H & Li 2013; Wang, Q 2014). Furthermore, the people who live in bigger and more developed cities obtain more entitlements than the people who live in smaller and more developing cities (Hu, X 2014; Wang, Q 2014).

The difference between the ‘agricultural householder’ and the ‘non-agricultural householder’ involves more than 80 entitlements (Wang, Q 2014), which can be divided into four main aspects: employment resources, education, social welfare, and community and public services.

Firstly, the differences of employment resources are mainly shown in the opportunities of employment and remuneration. For example: Guo (2013) indicated that ‘non-agricultural householder’ in a special city was one of the important entry thresholds in the Chinese career path. Chen (2012) supported Guo’s opinion. He pointed out that most graduates with ‘non-agricultural householder’ could gain more opportunities to find a job, because of the great number of job opportunities in cities, particularly in state-owned

large companies and in the public service which mainly opened its doors to the employees with ‘non-agricultural householder’. Even if some enterprises or government departments open doors for the graduates with ‘agricultural householder’, they have only a limited number of positions.

Moreover, the distinctions of remuneration are huge. Huang (2012) reported that due to *huj*i distinction, the employee with ‘non-agricultural householder’ earned a wage more than 20 percent to 30 percent than the employees with ‘agricultural householder’. Wan and Li (2013) also indicated that gaining ‘non-agricultural householder’ could make personal income increase immediately by at least 3.5 percent. National Bureau of Statistics of the People’s Republic of China (NBS) (2015a) showed that the ratio of income difference between ‘non-agricultural householder’ and ‘agricultural householder’ reached 3.22 in 2013, as the following Table 2.3 shows. Guo (2013) supported strongly this opinion and he further pointed out that the bigger or more developed the city people live in, the bigger income difference exist, due to the difference among *huj*i.

Table 2.3: The different incomes between ‘non-agricultural householder’ and ‘agricultural householder’

	1990	1995	2000	2010	2013
Average income of ‘agricultural householder’ (Yuan)	686	1,578	2,253	5,920	8,896
Average income of ‘non-agricultural householder’ (Yuan)	1,510	4,283	6,488	23,069	28,648
Income difference ratio	2.20	2.71	2.88	3.90	3.22

Source: Adapted from National Bureaus of Statistics of the People’s Republic of China (2015a)

Secondly, Chinese citizens with ‘non-agricultural householder’ have obviously more education resources for both the individual and their children’s education (Chen, H 2012; Du, X 2011; Hu, X 2014; Liu, L 2014; Ma, F 2013; Tao & Wang 2014; Wang, S, Liu & Wang 2013). Compared to people with ‘non-agricultural householder’, ‘agricultural householder’ has lower income and credits. Furthermore, the policies regarding education are different between people resident in urban and rural areas. For the above two reasons, ‘agricultural householder’ has more difficulty obtaining education funding both from government and bank loans (Chen, H 2012). The children of ‘agricultural householder’ usually have no right to study in cities, even if their parents work in cities. Therefore, many children have to study in their *huj*i’s place and so they have to reside with their grandparents instead of staying with their parents who work in cities (Yan 2015). Wang

(2014) agreed with this view, and he further pointed out that although some schools opened doors for the children with ‘agricultural householder’ status, they needed to pay a huge extra ‘administration fee’, compared to ‘non-agricultural householder’. The expensive extra education cost makes most of them give up their education chances in cities, or in big cities.

Thirdly, ‘non-agricultural householder’ gains more benefits in social welfare. The social welfare include health, such as hospital, government medical care and health insurance, which is like the Medicare system in Australia; unemployment benefits; and pensions. For example, Huang (2012) reported that ‘non-agricultural householder’ obtained, higher benefits (such as earning 20.2 percent more in pension, 29.0 percent more in Medicare, and 35.8 percent more in unemployment benefits) than the ‘agricultural householder’. Yan (2015) showed the difference on Medicare. Even though Medicare has been improved in rural areas in recent years, the difference exists. In general, ‘non-agricultural householder’ can get at least 80 percent back from Medicare; however, ‘agricultural householder’ only gains a 50 percent refund return from Medicare (Yan 2015).

Finally, there are differences in community and public services. Living in the country means one has to face the problems of less personal service and fewer community services such as radio and televisions (Wang, Q 2014).

As explained above, gaining ‘non-agricultural householder’ brings many benefits for ‘agricultural householder’. In addition, the more developed and the bigger the cities in which *hujia* is acquired, the more benefits obtain, because these cities easily get more social resources (Chen, Y 2013; Zou, Y 2014). In order to restrict strictly population migration especially from rural to urban, from small cities to big and developed cities, the Chinese government carried out a series of laws. The first restrictive legislation is *<People’s Republic of China Household Registration Ordinance>*, issued in 1958. Article X in this legislation indicates that a person, who holds Chinese citizenship, who migrates from rural to urban must hold one of following certifications, which confirm that:

- this person has been employed by the labour department in a city; or
- this person has an offer from university or school; or

-
- this person has gained permission to migrate to a city by household registration office in the urban centre.

(The National People's Congress of the People's Republic of China 2015)

In 1977, a provision from *<State Council approved the Ministry of Public Security on Account of the Migration Process>*, issued by Ministry of Public Security Bureau in China, indicated that it would enhance control of people migrating from rural to urban areas. On the contrary, there is no restriction of migration from urban to rural. In addition, there is some restraint of migration among the same level cities or towns (公安部治安管理局 2009).

Since the end of 2001, the restrictions of migration from rural to certain small towns, small cities, medium cities, even some big cities have been diminished. However, the number of the population gaining 'non-agricultural householder' accounts increased rapidly, reaching more than 250 thousand within three years. The number of temporary population with 'agricultural householder' accounts, who are resident in cities and who expect to move to city, were more than two million (Zhang, L & Wang 2013). According to *<Floating Population in China Development Report 2013>*, issued by State Family Planning Commission in China, more than half of the farmers with 'agricultural householder' classification desire to migrate to cities (Hu, X 2014; 国家卫生计生委流动人口计划生育服务管理司 2013). According to data from NBS in 2010, Hu (2014) also found that only 33.40 percent of the 'agricultural householder' group intended to live in rural areas permanently (Hu, X 2014).

Therefore, the Chinese government had to tighten up the migration system, particularly in big cities, such as Beijing, Shanghai, and Guangzhou, because the government could not offer the relevant resources (such as employment, education, and health) to the new migrants within a short period (Hu, X 2014; Zhang, L & Wang 2013).

Faced with the three requirements of changing *hujia*, as mentioned above, there are two main ways a resident could make migration come true via individual efforts: being employed in a city or gaining an offer from a university. Under the policy of *<Down to the Countryside Movement>*, people left the cities to become farmers (Chen, J 2012).

However, since the regulation of *<Educated Youth Back to the City>* issued, more than 10 million people have been employed by the labour department in cities. They moved back permanently to the city since 1979 (Xu, RJ 2004). Therefore, there is an abundant labour supply in the labour market in cities.

With the restriction of *hujia* policy, it seems only one way could change their *hujia* from ‘agricultural householder’ to ‘non-agricultural householder’ or change *hujia* from small cities to big cities via individual effort. The only way is gaining an offer from a university (Chen, H 2012; Gu, D 2013). In gaining ‘non-agricultural householder’s especially in big cities, the graduates need to keep improving their education level. Doctoral education is recognised as a more competitive way to transforming *hujia* types or gaining *hujia* in big cities (Chen, H 2012; Hu, X 2014).

The graduation relevant policy

In China, before 1999, graduates, finding jobs, needed to follow the ‘distribution by government’ policy (Li, L & Xu 2014). That means the graduates could get the job only through the government distribution. However, after 1999, this policy was replaced by the policy of ‘two-way choice’ or ‘mutual choice’ (Li, L & Xu 2014). That is to say, the graduates started to make the final decision for finding jobs in the labour market by themselves. The process of finding jobs is based more on the two parties: employers and graduates. The ‘mutual choice’ policy means that the graduates found their jobs and the employers recruited their employees through the labour markets (Li, L & Xu 2014). Due to the influence of *hujia* as mentioned above, many graduates chose to find jobs in cities, particularly big cities, because once they obtained the job in certain organisation in certain cities, then they could gain the opportunities to migrate permanently in these cities. This section introduces the process of graduates finding jobs and the relevant policy linked with the graduation.

As the institutions providing the graduates, most universities, particularly the national key universities in China, have limited numbers of *paiqianzheng* (派遣证)¹⁶. The *paiqianzheng* is a paper document which is distributed by the Chinese government. The Chinese universities have the authority to send the graduates to work in identified

¹⁶ In the future, I will simply use pinyin of *paiqianzheng*.

enterprises or government institutions in certain cities, if the enterprises agree at the same time to give the offers to the graduates. The numbers of *paiqianzheng*, issued by Chinese government to different universities, are different each year. The number of *paiqianzheng*, issued by the Chinese government, depends on the universities' qualification and ranking (Zhao, X 2005).

If full-time students want to find ideal jobs and then permanently move to the new cities in China, most of these students need to graduate within a 'certain period', because *paiqianzheng* are used only in the year of their graduation. *Paiqianzheng* will expire and cannot be renewed in the next year (Zhao, X 2005).

The Figure 2.2 shows the process of finding a job within a certain period for a graduate. Most graduates will finish their degrees at the specific period: June or July each year in China. If the graduates need to find their new jobs and then move to new cities, it means graduates need to complete a series of things related to finding job process within six months. The series of things include: signing the 'tripartite agreement', gaining *paiqianzheng* from university, and also ensuring the 'accepting information and qualifications of enterprises' relevant information, such as a 'cadre status'

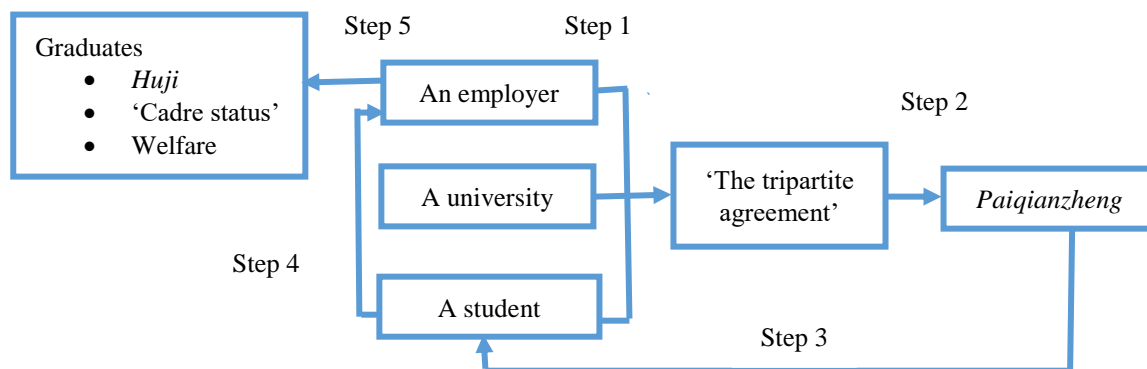


Figure 2.2: The process of finding a job for full-time Chinese university's graduates

Source: Developed for this research

The 'tripartite agreement' is an agreement which is signed by three parties: a graduate, an employer and a university, when a full-time student or a graduate finds a job. The 'tripartite agreement' is a reference index used to record the statistics full-time graduate's employment rates in Chinese universities. If a student signs the 'tripartite agreement' with

an approved enterprise in his/ her last semester in the graduate' year, this graduate can gain *paiqianzheng* from the university. After this graduate passes *paiqianzheng* to his/her employers, *paiqianzheng* will be added in the graduates' individual files, which are managed by this company. There are different levels of employers. Some enterprises, especially government departments, and large state-owned enterprises, could provide the limited quota service to help fresh graduates change their *huji*. However, if graduates did not find jobs within the limited time, after they graduated, then graduates' individual files would be directly sent back to their hometown. That is to say, they lost chances to change their *huji*, and lost opportunities to change their individual identities to 'cadre status' as graduates.

Furthermore, the term of 'cadre status' needs to be clear here. Chinese identity is divided into two *huji* accounts: farmers and city dwellers. The identities of individual city dweller are also divided into two different classifications: worker and 'cadre status'. The term 'cadre statuses' is from the human resource policy since the 'planned economic system' in China and then this term is used in present China. The termed of 'cadre status' is linked with the gaining a position from public service or the stated-owned enterprises (Baiké 2017a). Workers are managed by the Bureau of Labour Management. Cadre is managed by the Bureau of Personnel Management. If the university' graduates find appropriate jobs, then have the *paiqianzheng*, and the accepting qualified organisations agree to recruit the graduates, then the graduates can change their identities to cadre.

Most Chinese people including farmers are expected to have cadre identity. The identity can decide people's career qualification, graduates' *huji*, and individual welfare in the future. However, if graduates cannot find appropriate jobs within the certain period, their *paiqianzheng* would expire and then they also lose opportunities to change their 'cadre status'.

There are many studies on graduates who find jobs and then migrate to Beijing, the capital city of China (Du, F & Cui 2017; Hu, Y 2006; Li, L & Xu 2014). Beijing, as the political, economic and cultural centre, is one of the big cities which many graduates want to migrate to in China (Zhao, X 2005). The policies linked with the Beijing's graduates without Beijing *huji* include two quota: 'the quota of entering Beijing' (进京指标), and

‘the quota of staying in Beijing’ (留京指标). ‘The quota of entering Beijing’ (北京户口网 2017) is a quota for the graduates without Beijing’s *huj*i who have the qualification to find jobs in state-owned enterprises and public service in Beijing. The number of ‘the quota of staying Beijing’ is equal 10 percent of the graduates without Beijing *huj*i in this university (北京户口网 2017). The university normally provides the ‘the quota of staying Beijing’ to the graduates, according to the comprehensive evaluation of graduates in this university. The university should only offer this quota to excellent graduates (北京户口网 2017). Zhao (2005) indicated that most of Beijing’s universities provided this quota first to post-graduates who satisfied the university’s requirement. Then the outstanding graduates holding Bachelor degree had the opportunities to gain the rest of ‘the quota of entering Beijing’ (Zhao, X 2005).

‘The quota of entering in Beijing’ is owned by employers for recruitment of employees who have graduated without Beijing’s *huj*i. ‘The quota of entering in Beijing’ is issued by Ministry of Human Resources and Social Security of the People's Republic of China (MOHRSS) (北京户口网 2017). That is to say, the employer who has ‘the quota of entering in Beijing’ can provide the opportunities to gain Beijing *huj*i for the employee who satisfied the proper requirement. ‘The quota of entering in Beijing’ started after *huj*i policy established in 1950. The graduates must own both ‘the quota of entering Beijing’ and ‘the quota of staying in Beijing’ at the same time to gain Beijing *huj*i (中国经济周刊 2011). In recent years, ‘the quota of staying in Beijing’ has not often been used; however, MOHRSS controls ‘the quota of entering in Beijing’ by the numbers and the selection criteria (北京户口网 2017).

户籍网 (2017) reported that there were more than 300,000 graduates from the national key universities in China every year; however ‘the quota of entering in Beijing’ was less than 10,000 each year. So gaining the Beijing *huj*i is very difficult and then only the excellent graduates have the opportunities to obtain ‘the quota of entering in Beijing’. The number of ‘the quota of entering in Beijing’ will keep reducing in the following year. Compared to the amount in 2016, ‘the quota of entering in Beijing’ issued by Chinese government reduced to 6,000 in 2017 (户籍网 2017).

The policy related to migrating to Beijing was adjusted after 2005. Only the graduates majoring in the list of shortage of professionals, which changed each year depending on the demand from the labour market, could gain ‘the quota of entering Beijing’ (户籍网 2017).

There are some preferential policies for doctoral graduates. People (2003) pointed out that the doctoral graduates could directly gain the higher-level position rather than graduates holding bachelor or master degree. For example, for attracting the doctoral graduates working for their department in public services and state-owned enterprises, some organisations would directly give the director position for these doctoral graduates. In 2003, the Chinese public services directly recruited 69 doctoral graduates in the important positions as directors in different departments (People 2003). There is much discussion about whether the important positions are given to the doctoral graduates without enough relevant working experiences. Although this issue has been discussed for a long time, in order to attract the doctoral graduates, some organisations and departments still keep providing the higher positions for doctoral graduates in recent years. Zhu (2017) indicated that the government department in Jiang Xi province provided the working positions (deputy directors) for the doctoral graduated who graduate from 11 of Project 985 universities in the year of 2017.

Therefore, although the relevant benefit policies for graduation in the current year motivate many candidates to undertake and continue their doctoral degrees, these policies also give strict time limitation for the graduates to find their ideal jobs, and then gain the *huji* for the special cities.

Section 2.1 presented the Chinese background and context which involved five aspects: the history of traditional education in the imperial examination system, the development and history of Chinese education, economic background, geographical background, and the government policy relevant to higher education. The next section 2.2 introduces doctoral education in the Chinese context.

2.2 Doctoral education in the Chinese context

This section reviews the developments in doctoral education over the past 30 years in China, and then provides a basis for understanding doctoral degrees, doctoral candidates and supervisors in contemporary China, using information from governments, scholars and employers. Learning the background of Chinese doctoral education is significant to discuss the problem how the cultural custom and policy practice of China impact on the doctoral supervision in the Management within the Chinese context.

2.2.1 Historical background

Higher education in general began later in China than in Western countries such as Germany, America, the UK and Australia; the commencement of doctoral education in China was later than in Western countries as well (Nerad & Heggelund 2008; Park 2005; Xu, R 2013). However, due to the influence of traditional Chinese culture, and the persistent requirements for talented researchers, doctoral education has rapidly developed in China during the last almost four decades (Brandenburg & Zhu 2007; Ministry of Education of the People's Republic of China 2009b; Xu, R 2013; Zhang, LQ & Sun 2015).

The majority of relevant regulations on Chinese doctoral degrees and doctoral progress are produced by a standing committee of the National People's Congress and the State Council. A doctoral degree is regarded as the highest level academic degree and is conferred on people who have completed a prescribed period of postgraduate study (Department of International Cooperation and Exchanges Ministry of Education 1999). Regulations on conferring doctoral degrees were first introduced in 1981. These regulations included training goals, length of study, and type of training program. The Admission of Doctoral Students was ratified by the Pro-State Education Commission and The Academic Degree Committee of the State Council in 1982.

To sum up, because the traditional culture, social context and present policies can influence doctoral supervision, this section introduces the relevant Chinese doctoral education background and context for understanding how the cultural custom and policy practice of China influence doctoral supervision within the Chinese context.

2.2.2 The nature of Chinese doctoral degrees

The doctoral degrees in Chinese higher education system are awarded in 13 major fields: “Philosophy”, “Economics”, “Law”, “Education”, “Literature”, “History”, “Sciences”, “Engineering”, “Agriculture”, “Medicine”, “Military Science”, “Art”, and “Administrators” (Ministry of Education of the People's Republic of China 2017b). The 13 major fields have been further divided into 111 ‘first national key disciplines’ which have been increased by 38 sub-disciplines since 1997 (Ministry of Education of the People's Republic of China 2016d).

Typical doctoral applicants for doctoral degrees have to hold a master degree or an equivalent education qualification, and the applicants to be doctoral candidates are normally no more than 45 years old (Ministry of Education of the People's Republic of China 2014). When students apply, they also need to provide at least two recommendations from Professors or people with equivalent positions who are experts in the relevant academic field in the university or to the research (Ministry of Education of the People's Republic of China 2016c). The applicants also should have good *pinxing* (品行)¹⁷, that is including good *pinde* and behaviours, and upholding the leadership of CCP and support the socialism system (Ministry of Education of the People's Republic of China 2014).

The candidates’ selection progress depends mainly on the results from the entrance examinations. Applicants have to pass an entrance examination which consists of two steps: preliminary examinations and re-examinations (Ministry of Education of the People's Republic of China 2009b). The time, place, and the subject of the preliminary examinations, which are written examinations, are arranged by different academic institutions (Department of International Cooperation and Exchanges Ministry of Education 1999; Ministry of Education of the People's Republic of China 2009b). Once the candidates pass the preliminary examinations, they then obtain the opportunities to participate in the re-examinations which focus on their professional knowledge

¹⁷ In the future, I will simply use pinyin of *pinxing*.

(Department of International Cooperation and Exchanges Ministry of Education 1999; Peking University 2009).

During the whole PhD candidates' studying period, only one supervisor is mainly in charge of the students' learning programs (Xu, R 2013). Xu (2013) argued that the One Supervisor Policy made the supervisors clearer on their roles and responsibilities. Chinese doctoral programs are usually three to four years full-time. Part-time programs generally need to be extended to six to eight years, depending on the individual rate of progress (Ministry of Education of the People's Republic of China 2009c). In order to improve the doctoral candidates' quality, many research universities and research institutions start to reduce the part-time doctoral programs. Some universities lower the ratio of new part-time to whole of the enrolment candidates from more than 30 percent down to 10 percent. Some universities did not even open the door to new part-time candidates any more (Zhang, LQ & Sun 2015).

The Chinese doctoral programs involve both course work and research studies. All doctoral candidates should complete the relevant courses (getting 15 points credits) involving 'Marxist theory', 'English', 'Professional courses' and 'Foundation theoretical courses' (Ministry of Education of the People's Republic of China 2016c). Once these candidates obtain the 15 points credits, they gain the qualifications to commence their research projects. The courses of 'Marxist theory' and 'English' take from one-third to half of the total studying credits (Xu, R 2013). In China, every leader stressed the importance of 'Marxist theory', because 'Marxist theory' is the guiding ideology of CCP. One of the core values of this version of Marxist theory is to explain the inevitability of the role of the leading party. Dong (2008) and Renminribao (2018) emphasised the importance to *bentuhua* (sinification) of 'Marxist theory', and indicated that in China, 1.3 billion population and 70 million members of CCP should have the same common ideology and spiritual values, which is the Marxist theory. Otherwise the CCP would collapse; China would be split; Chinese socialist modernization would not be carried out; and Chinese citizen's rights and benefits would be broken (Dong 2008).

Figure 2.3 shows the whole research project's process (Xu, R 2013). The length of a Chinese thesis is around 100,000 words (Xu, R 2013). The organisations or institutions

awarding doctoral degrees should set up the ‘Oral Defense Committee’ and ‘Thesis Assessment Committee’. The ‘Oral Defense Committee’ is in charge of the organisation of Oral Defense, and makes decisions regarding candidates’ theses submission. The members of ‘Oral Defense Committee’ should include both internal and external experts. The decisions of ‘Oral Defense’ are made by vote. Passing the assessment needs to obtain agreement from more than two-third members of the ‘Oral Defense Committee’ (The National People's congress of the people's republic of China 2016).

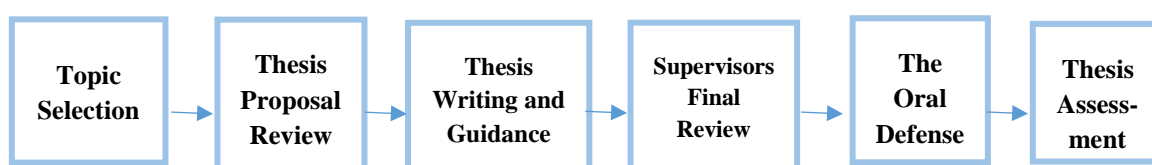


Figure 2.3: Research project's process

Source: Adapted from R Xu (2013)

After candidates have passed their Oral Defense, they can submit their doctoral theses. The candidates can be awarded doctoral degrees, if they generally satisfy the following requirements:

- Candidates need to support the leadership from The Communist Party of China and uphold the socialist system.
- Candidates should pass the examination of course work and Oral Defense.
- Candidates should have the following skills. They need to:
 - master broad theoretical knowledge background and professional knowledge in their research fields;
 - have relevant research ability to work independently;
 - have original content in their research fields.

(The National People's Congress of the People's Republic of China 2016)

In addition, the degree granting also needs to satisfied the requirements of academic institutions. The different academic institutions have various requirements. For example, some universities require doctoral candidates to publish numbers of high ranking journal articles within the limited learning period (Graduate School of Renmin University of China 2018; Tsinghua 2010). Some universities only granted doctoral degrees to the

candidates with CET-6 certification, which is a kind of English assessment (Graduate School of Beijing Jiaotong University 2017).

2.2.3 Doctoral candidates in contemporary China

Compared with the gradual increase of the number of doctoral supervisors, the number of doctoral candidates has increased sharply over the past three decades in China (see below). There are three main reasons for this increase. Firstly, to fulfil official regulations through the need to expand higher degree enrolments to counteract the pressure of rising unemployment (Ngok, 2008). Secondly, the demand for more highly educated employees (Guo, Z & Beatrice 2008) and the increasing numbers of government agencies and labour markets that require employees who hold doctoral degrees (Denicolo 2003). Finally, Confucian culture still influences Chinese thought and behaviour. Chow (2004) indicated that as Confucian values stressed the importance of education, people wanted a higher level of education.

Figure 2.4 shows the increase in doctoral education in China. Although the doctoral regulations were not issued until 1981, a formal program of Doctor of Philosophy (PhD) was commenced earlier than these regulations, promulgated in China in 1978. Twelve doctoral students enrolled (China Review News 2009) and six were awarded Chinese doctorates in 1982 (Ministry of Education of the People's Republic of China 2009b; Xu, R 2013). In 1997, 12,917 new doctoral candidates enrolled, and by the end of 2014 the number of new enrolments had increased more than five-fold to around 72,634 (see Figure 2.4). A total of 312,676 candidates were enrolled in doctoral degree programs by the end of 2014, which was almost an eight-fold increase over 1997. Compared to other countries, China has the largest population of PhD enrolment candidates in the world (Ministry of Education of the People's Republic of China 2016a)

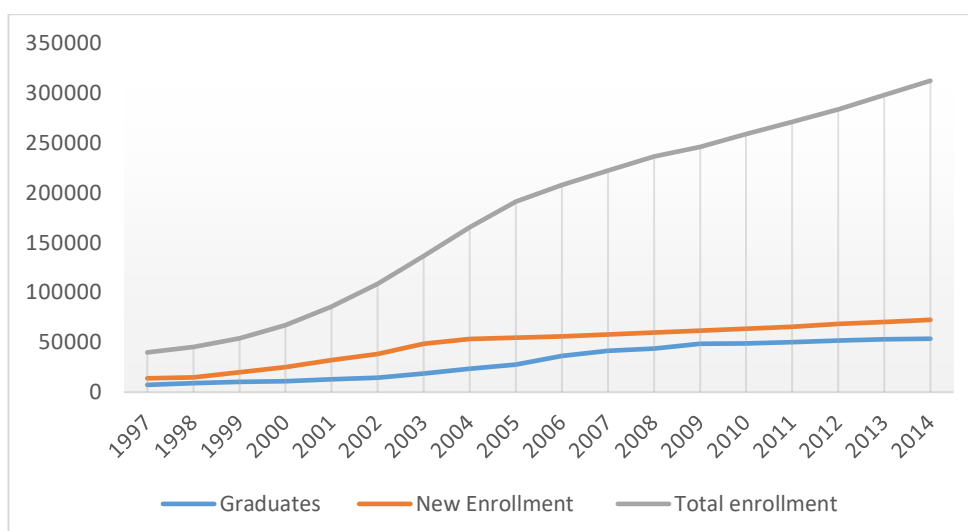


Figure 2.4: The number of doctoral entrants, total enrolments, and graduates in China from 1997 to 2014

Source: Adapted from Ministry of Education of the People's Republic of China (2016a)

The 312,676 PhD candidates enrolled in 2014 can be divided into three groups according to their funding sources. As Figure 2.5 shows, there were 245,626 candidates in 'state planned programs'¹⁸ (国家任务), 54,462 in 'contractual programs'¹⁹ (委托培养), and 12,588 in 'self-financed programs'²⁰ (自筹经费) (Ministry of Education of the People's Republic of China 2016a).

¹⁸ State planned programs means that Chinese government provide funds, such as tuition fee and financing fee, for doctoral candidates.

¹⁹ The contractual programs means that doctoral candidates gain the funding (including tuition fees and salary or living fee) from the company or academic institutions in which they currently work. Once they finish their doctoral degree, they have to go back to work in their original working place.

²⁰ The candidates, who are from self-financed programs, support most fees by themselves during the doctoral studying period.

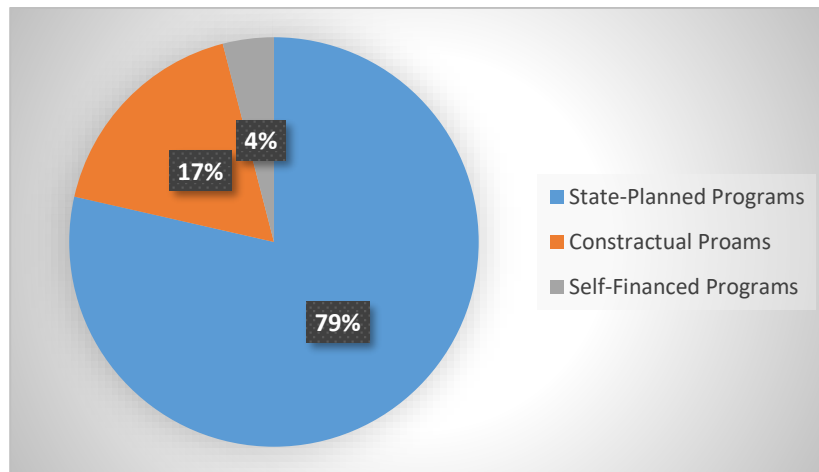


Figure 2.5: The distribution of doctoral candidate enrolments in 2014

Source: Adapted from Ministry of Education of the People's Republic of China (2016b)

Within the 13 major fields, the four academic fields with the most rapid growth in doctoral candidate enrolments in last 15 years are Engineering, Science, Medicine, and Management, (see Figure 2.6 below).

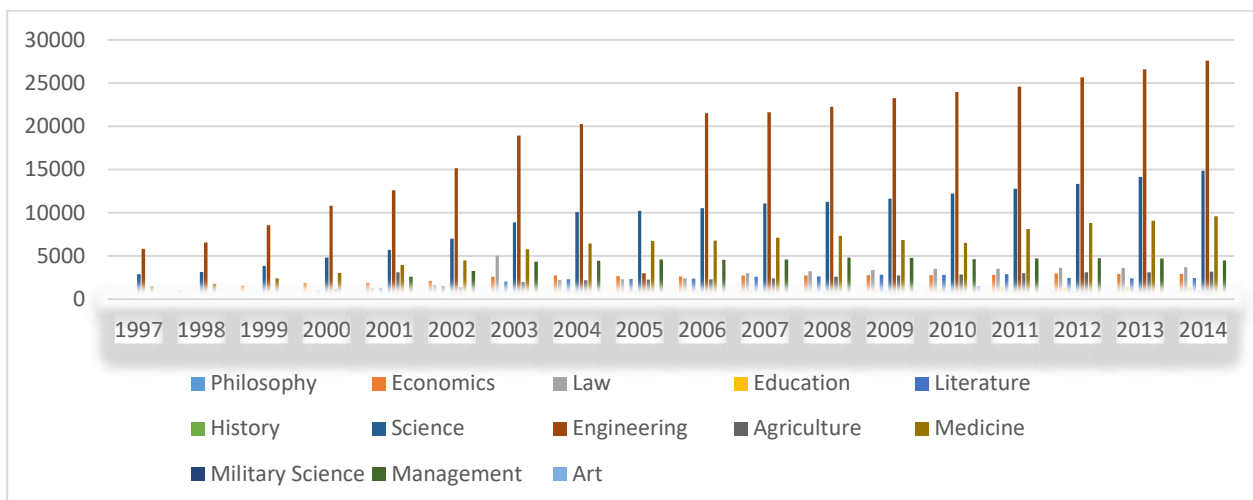


Figure 2.6: The number of doctoral candidates by Academic Field from 1997 to 2014

Source: Adapted from Ministry of Education of the People's Republic of China (2016a)

Despite this great increase in doctoral numbers, the completion rate within the required time limit of doctoral programs is decreasing gradually (Xu, R 2013). A report from China Statistical year book shows that from 1997 to 2014, although doctoral graduates increased in absolute numbers from 7,319 to 53,653, the graduate completion rate gradually decreased from 92 percent to 84 percent from 2001 to 2016 (Ministry of Education of the

People's Republic of China 2016a) (See Figure 2.7). Delayed graduation increased in many universities in China in recent years. For example, according to the statistics from PKU in 2010, around 50 percent candidates need to delay their graduation (Guo, J 2012).

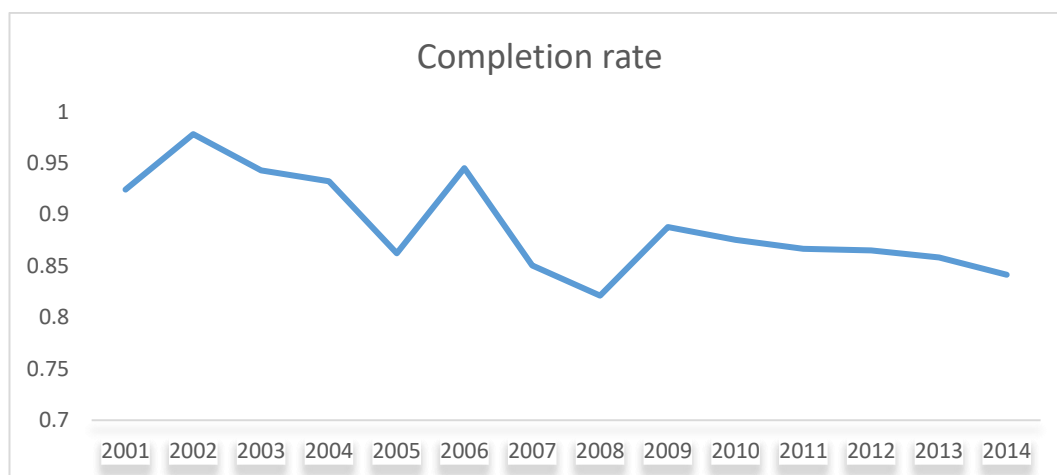


Figure 2.7: The completion rate in doctoral programs in China from 2001 to 2014

Source: Adapted from Ministry of Education of the People's Republic of China (2016a)

2.2.4 Doctoral supervisors in China

Some scholars mentioned that the shortage of qualified Professors is the main reason resulting in delayed graduation and decreasing of doctoral completion rate in recent years (Guo, J 2012; Xu, R 2013). Doctoral supervisors have an important influence on their doctoral students and impact the effective doctoral supervision. This section introduces information about Chinese doctoral supervisors who play an important role in the procedure of effective doctoral supervision.

Compared with the rapid (eight-fold) increase in doctoral candidates (and master candidates have increased more than six-fold), from 1997 to 2006, the increase in the number of doctoral supervisors has been slow (around six-fold). Numbers of supervisors was 12,121, in 1997, which included 4,650 supervisors who supervised only doctoral candidates and 7,561 supervisors who guided both master and doctoral students. The number rose to 80,349 in 2014, which comprised 16,028 supervisors who supervised only doctoral candidate and 64,321 supervisors who guided both doctoral and master students (Ministry of Education of the People's Republic of China 2016a).

The number of doctoral supervisors is distributed unequally in different fields, and the shortage of doctoral supervisors is particularly distinct in Social Science. Yang and Xie (2011) reported the ratio of student-supervisor depending on different fields in an investigation in 2011 as the following Table 2.4 shows.

Table 2.4: An investigation regarding student-faculty ratio in 2011

Fields	Student-faculty ratio
Humanities	6.6 : 1
Social Science	15.6 : 1
Science	9.4 : 1
Engineering	9.8: 1

Source: Adapted from Q Yang & Xie (2011, p. 50)

In addition, as Figure 2.8 shows, the most common age of doctoral supervisors in 2015 was between 41 to 59 years, and almost one tenth were over 60 years of age, which is beyond retirement age. Only 12 percent (13,580) of doctoral supervisors in the PRC were female at the end of 2006 (Ministry of Education of the People's Republic of China 2016a).

To address the shortage of supervisors and to increase the effectiveness of current and new supervisors, exploring the effective characteristics of doctoral supervision and high-quality approaches is critical in the Chinese context.

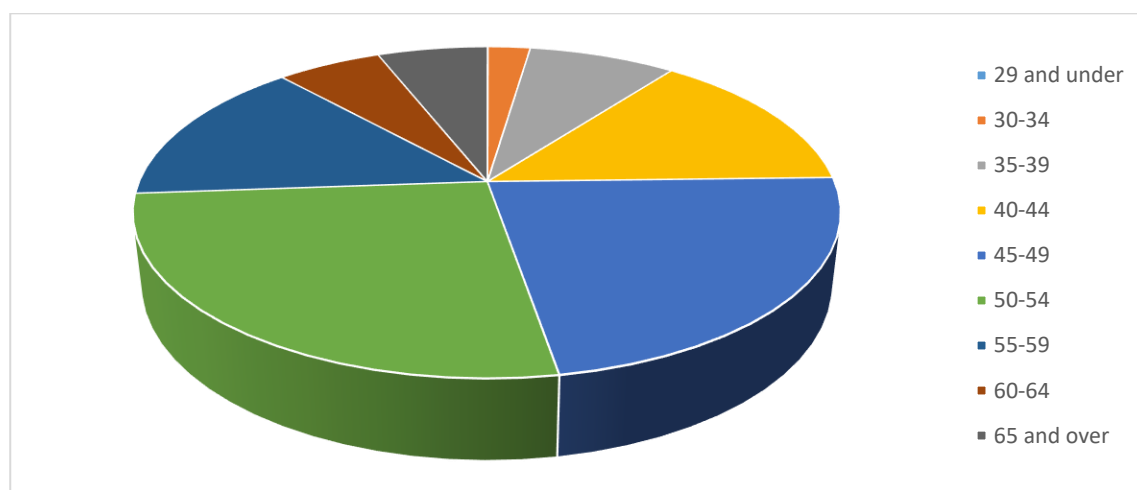


Figure 2.8: Aggregate data on doctoral supervisors in China according to age group in 2014

Source: Adapted from Ministry of Education of the People's Republic of China (2015c)

Ngok (2008) argued that a high ratio of students to supervisors was not good for the quality of PhD graduates. The finding from a survey in 2011 showed that some doctoral supervisors were under strong pressure derived from the high student-supervisor ratio (Yang, Q & Xie 2011). In some universities, a supervisor guided more than 30 doctoral candidates and master students at the same time, which was not considered beneficial for the development of doctoral students (Yi 2007). Yang and Xie (2011) pointed out if a doctoral supervisor put all his/her energy to doctoral education, the ideal student-supervisor ratios for doctoral supervisors were: 5.6:1 in Humanities, 7.7:1 in Social Science; 5.5:1 in Science and 4.8:1 in Engineering. Furthermore, to cope with the increased numbers of students, many supervisors have to work in fields in which they were not accomplished (Ngok, 2008).

Development of Chinese doctoral supervisors

The qualification to be a doctoral supervisor is awarded and authorized by research institutions that have the right to award doctoral degrees. Following the initial regulations introduced by the Chinese Committee of Degrees in the State Department in 1995, those eligible to be doctoral supervisors should:

- be Professors (or have an equivalent position) who are well versed in their discipline
- be supporters of the CCP's regulations and political ideology; have good *pinde*; and have a rigorous research attitude
- have high quality publications in recent years that are recognised by internationally respected/known/accepted scholars
- have independent research abilities
- hold a government funded or province funded research project and have sufficient funds to support the supervision of their PhD candidates
- have successful experience in supervising master students. If they work in a university, they should have reasonable teaching experience for undergraduates or master students
- obtain help from an academic team who can effectively assist them in guiding the doctoral candidate.

(国务院学位委员会 1995)

The typical circumstance of doctoral supervisors in China

In the traditional Chinese mind, the position of doctoral supervisor not only signifies supervising doctoral candidates, as in Western countries, but is also regarded as a higher position and a kind of honour title (中国远程教育 2005). This higher position is derived from the influence from traditional Confucian culture, the position of teachers or lecturers is regarded as fatherly (Lin 2016). Although ‘doctoral supervisor’ is not listed as a title of a technical post in the Higher Education system, it is highly regarded due to the way the role has developed within the Chinese context.

Liu (2005) argued that at the early stage of the establishment of the regulations of the selection of doctoral supervisors in China, a strict requirement for choosing supervisors was catering for social and academic demands in China (Liu, Z 2005). However, based on the formula that doctoral supervisors have to be qualified members of a professorial group, the policy required the formation of a special doctoral supervisors’ group in the last two decades in China.

With the development of Chinese postgraduate education, the traditional selection system for doctoral supervisors has some disadvantages. For example, as doctoral supervisors can only be chosen from among Professors, the pool of doctoral supervisors is too small to satisfy market requirements. It also places too many burdens on these Professors, who also need to complete their teaching tasks, undertake research projects, and perform many social and leadership activities as leaders within their disciplines. Consequently, they might not have much energy left for supervising their doctoral candidates (He 2006). It is also disastrous to lose potentially good doctoral supervisors just because they are not Professors. Due to the limited number of positions for Professors in universities, many Associate Professors who have doctoral supervisors’ abilities, and have mastered sophisticated projects could be doctoral supervisors, but cannot because they are not Professors (中国远程教育 2005).

As a result of the above, in recent years, it has become a trend for elite and enthusiastic Associate Professors to obtain positions as doctoral supervisors in China (Liu, Z 2005). PKU was regarded as the forerunner in this area by allowing supervisors to be chosen after appraisal by colleagues. In 2003, Qi Limin of PKU became the first doctoral

supervisor in China with the position of Associate Professor (Liu, Z 2005). Other universities involved in Project 985, such as Fudan University and Harbin Institute of Technology, then followed this innovation, and some outstanding Associate Professors with doctoral degrees were awarded the qualification of doctoral supervisors (Guangming Daily 2007; Zhou, K 2004). Bao et al. (2016) further indicated that in recent years, one of the reforms of Chinese doctoral education was providing the opportunities to the younger researchers to join in the group of doctoral supervision.

Nevertheless, some scholars expressed concern about the declining selection standard of doctoral supervisors. For example, Xu (2013) indicated that, in order to reduce the pressure from the imbalance of student-faculty ratio, and increase the number of doctoral candidates within a short time, some academic institutions started to use as new doctoral supervisors faculty members who did not satisfy doctoral supervisors' selection criteria issued in 1995. This phenomenon, as Xu (2013) argued would result in doctoral supervisors' quality being lower than before, and then decreased the quality of doctoral program.

To sum up, based on the review of literature on doctoral education within the Chinese background, Chinese doctoral education faces the following problems:

- lack of competent doctoral supervisors which leads to decrease in the quality of doctoral training (Xu, R 2013).
- longer time to complete a doctoral degree than universities requirements prescribe and the government wants (Guo, J 2012; Ministry of Education of the People's Republic of China 2009b).

Although there are several reasons causing the current problems in China, Xu (2013), Yi (2007) and Wang and Du (2001) argued that, just as in other countries, supervisors played an essential and core role in the doctoral education training process. Doctoral supervision has thus become an important issue in Chinese doctoral education. This area will be explored in the next Chapter.

2.3 Conclusion

Understanding the big picture relating to Chinese background and context, and learning more about Chinese doctoral education background can help the researcher to learn about how the cultural custom and policy practice of China influence contemporary Chinese doctoral supervision. This chapter reviewed the literature on two main areas: Chinese background and context, and doctoral education in the Chinese context.

The section of Chinese background and context showed five types of information. Firstly, the Imperial examination system, named *keju* was described. Even if the *keju* no longer exists since more than one hundred years ago, however, as the longest existing system, *keju* influenced the traditional intelligentsia's fate, and this system still impacts on contemporary Chinese education forms and education ideas and values. Secondly, the traditional Confucian culture and the development of Chinese education history were presented. The Confucian culture had been embedded into the Chinese mind, and deeply influences the Chinese foundational values and daily behaviours; due to the influence of the current social context and policies, many traditional Confucian virtues have been developed to *pinde* in the contemporary era. Thirdly, the Chinese economic background related to the education system were outlined. In order to improve the general education level, the Chinese government kept expanding policy on the higher education system, and continued to provide funding support for the academic institutions. Fourthly, geography is the other factor to influence the distribution of Chinese higher education. Although the Chinese government emphasised improving the education quality particularly in Middle China and West China in 'Thirteen Five Plan' in 2017, the key educational projects in these areas focus more on education on the stages of early childhood, primary education and secondary education, rather than higher education. Therefore, the majority of funds and high reputation academic faculties still locate in East China, concentrated in big cities. Finally, the relevant government policies are listed. The policies include *hujj* policy, which is an administration policy for controlling the people migration within China, and the graduation relevant policy, which emphasised the importance of finding the ideal job within the special limited time for the graduates within the Chinese context.

The section discussing doctoral education in the Chinese context consisted of four aspects. The introduction to the historical background showed that although Chinese doctoral

education started later than in Western countries, it has dramatically developed in recent years in China. Since 1981 the regulation on conferring doctoral degrees was issued, the Chinese doctoral education has formed a mature system involving: the process of doctoral candidates' application, the training process, and assessments process. Finally, the current general information of doctoral candidates and doctoral supervision was introduced. The next chapter will focus on presenting the international literature on doctoral supervision

Chapter 3:

Literature Review - Doctoral Supervision

Chapter 2 presented an overview of the literature on the Chinese background and doctoral education in the Chinese context. For the purpose of this research into how the cultural custom and policy practice of China influence doctoral supervision in Management in China, it is necessary to review the literature on supervision practice, particularly in China. However, when I reviewed the literature, there were only a few articles on Chinese doctoral supervision. As introduced in Chapter 2, compared to Western countries, such as America, the UK and Australia, the commencement of doctoral education was very late in China. In order to develop rapidly doctoral education and doctoral supervision, particularly in Management, the Chinese government, the policy makers in the education system, and Chinese scholars paid much attention to learn what the initial and advanced doctoral supervision models from the Western countries looked like and they preferred to learn from successful practices and positive experiences in Western countries, through adjusting the supervision process and activities according to the cultural custom and policy practice in the Management discipline in China, and then made a new theory or new models which are suitable for doctoral supervision in China. (The process applying the Western models or theories within the Chinese context is *bentuhua*, as Chapter 1 introduced). Therefore, in this thesis, reviewing the related literature on both international doctoral supervision and Chinese doctoral supervision is necessary in this research. I will also focus on introducing the three main aspects, which play significant roles in the whole process of doctoral supervision. The three main aspects are the factors related to doctoral supervisors, the factors related to doctoral students, and the other factors in the academic environment.

This chapter commences with an overview of the supervision particular to the area of doctoral education (Section 3.1). The three main elements of supervision are then introduced. These three elements include: the factors related to doctoral supervisors (Section 3.2); the factors related to PhD students (Section 3.3); and other factors in the academic environment (Section 3.4). Based on the overview of the literature on doctoral supervision, the research questions are discussed in Section 3.5. The structure of Chapter 3 is shown as Figure 3.1

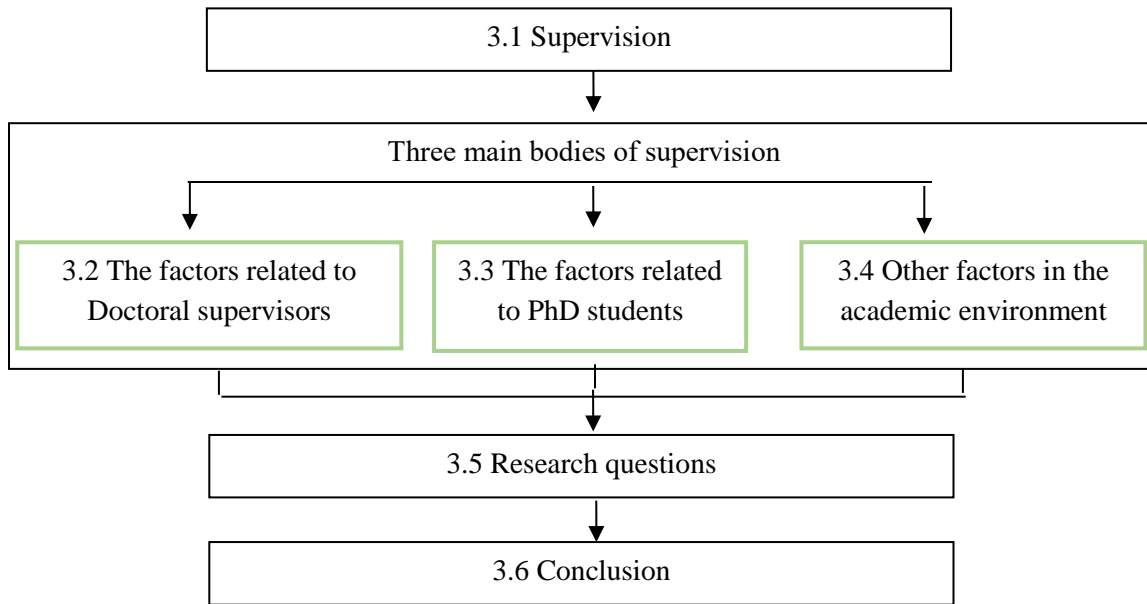


Figure 3.1: Structure of Chapter 3

Source: Developed for this research

3.1 Supervision

In higher education institutions, supervision of a Higher Degree by Research (HDR) is defined as a dynamic, facilitative, complex and unstable process (Collins 2015; Grant 2003; Watt 2016). Many factors could influence the supervision process. These factors involve the values, beliefs, the expectations from supervisors and supervisees, and previous skills and knowledge (Askew et al. 2016; Collins 2015; Maxwell & Smyth 2011; Waghid 2006; Watt 2016; Watts 2008). Murphy and Wibberley (2017, p. 64) emphasised that “Supervision sessions were not only a one to one event, occasionally it was a team approach with my associate supervisor also attending”. In Turner’s study, one of the interviewees, Brad, used a metaphor to describe his feelings about doctoral supervision, based on his own experience. Brad thought that “doctoral supervision would be quasi-collegial and intellectually stimulating, requiring a light touch and minimal intervention such as providing a book or an idea and seeing the student ‘run with it...as I did’” (Turner 2015, p. 94). Plenty of studies described doctoral supervision using the general terms including guiding, advising, teaching, supporting, assisting and engaging in conversation in their research (Boehe 2016; Ismail, HM, Majid & Ismail 2013; Kassan et al. 2015; Kobayashi, Grout & Rump 2015; Majcher & Daniluk 2009; Turner 2015).

“The purpose of supervision is to steer, guide and support students through the process of conducting a doctorate” (Doloriert, Sambrook & Stewart 2012, p. 733). The important and core role of doctoral supervision is to ensure successful “crossing of threshold concepts” (Ismail, HM, Majid & Ismail 2013, p. 166). In order to achieve the original purposes, the core contents of doctoral supervision vary based on the time change, as the following Table 3.1 shows (Ismail, HM, Majid & Ismail 2013, pp. 166-7).

Table 3.1: The core of doctoral supervision in the different stages

Stages	The core of doctoral supervision
The first stage	<ul style="list-style-type: none"> • Identifying the right partnership • Assessing students’ needs • Meeting agreed expectations • Establishing strong conceptual structure and research plan
The second stage	<ul style="list-style-type: none"> • Encouraging students to start writing • Initiating regular meetings • Providing high quality feedback • Making students feel as part of the academic community • Inspiring and motivating • Offering assistance during personal or academic crises
The final stage	<ul style="list-style-type: none"> • Having a genuine interest in the students’ future career • Monitoring the final outcomes

Source: Adapted from HM Ismail, Majid & Ismail (2013, pp. 166-7)

As mentioned earlier, the definition of effective supervision (or good supervision) has connecting

more to it than that in terms of both ‘outcomes’ and ‘outputs’...[and] ‘effectiveness’ means a high-quality submission, completion on time or as near as possible, and dissemination to the subject community; with regard to the latter, it means that the candidate has successfully developed the creative, critical and analytical skills and knowledge of a researcher and laid the basis for their future career inside, or increasingly outside, academia” (Taylor, S, Kiley & Humphrey 2018, p. 2).

Effective supervision by universities is “successful, timely completion, frequently enabled by the imposition of structured milestones and associated deadline” (Collins 2015, p. 597). Overall, Deane and Peterson (2011), and Pearson and Kayrooz (2004) further

emphasised that effective supervision also should be evaluated by the indicators of both students' satisfaction and students' learning.

Five advantages proceed from effective supervision. Firstly, effective supervision is the vital element in doctoral education, particularly monitoring student progress (Holbrook, Bourke & Cantwell 2006; Turner 2015), and providing the basic and external guarantee of PhD successful and timely completion without prolonged studies (Collins 2015; Frischer & Larsson 2000; Ismail, HM, Majid & Ismail 2013; Löfström & Pyhältö 2015, 2017; Park 2005). Devos et al. (2017, p. 67) emphasised that "a supporting supervisory style may increase doctoral students' chances to stay on track and complete their PhD". According to the result from a Postgraduate Research Experience Survey, more than 95 percent of postgraduates in the United Kingdom emphasise that supervision was the most important factor to influence their successful degree completion (Ismail, HM, Majid & Ismail 2013). Similarly, Liu and Wang (2011) reported in their investigations from Beijing Forestry University that, from the doctoral students' perspective, doctoral supervision was the second most important factor in deciding to complete their research projects.

Secondly, some scholars suggested that effective doctoral supervision should focus on students' expectations (Boehe 2016; Ismail, HM, Majid & Ismail 2013), which should be well-matched with supervisors' expectations, which increased students' satisfaction (Löfström & Pyhältö 2015). For example, Overall, Deane and Peterson (2011) indicated that "effective doctoral supervision involves supporting students to voice and act on their own ideas while simultaneously providing guidance on how to complete research tasks" (Overall, Deane & Peterson 2011, p. 791), and the process of effective doctoral supervision should support flexibly the needs of individual students (Overall, Deane & Peterson 2011). Yang (2012, p. 67) pointed out within the Chinese context, effective doctoral supervision needed to concern students' future career development, including "the length between graduation and employment, nature and level of employment, starting salary, professional development and workplace performance".

Thirdly, effective supervision is also necessary to build up a trusting and respectful relationship between supervisors and students (Manathunga 2015; Marland, Lyttle & Paul

2003). Fourthly, effective supervision can reduce students' drop off (Cullen et al. 1994; Ives & Rowley 2005; Kyvik & Smeby 1994). Finally the outcome of successful doctoral graduates, which is closely linked with doctoral supervision, can win benefits for educational institutions, such as reputation and financial implications (Vilkinas 2008).

In contrast, ineffective supervision can consist of lack of supervision and overdependence on supervisors (Löfström & Pyhältö 2014). The ineffective supervision brings negative influences to both educational institutions and doctoral candidates. For example, poor supervision decreases students' job prospects and quickly depletes the students' funding (Economist 2010). A great deal of research found that lack of doctoral supervision caused problems, such as increased students attrition rates, prolonged studies, increased friction between supervisor and students, lower levels of welfare, poor quality of doctoral dissertations, and having problems in the labour market (Agu & Odimegwu 2014; Bravo, Saint-Mleux & Dubois 2007; Cuthbert & Molla 2015; Devos et al. 2017; Dysthe, Samara & Westrheim 2006; Green, P & Bowden 2012; Hasrati 2005; Löfström & Pyhältö 2014; Mackinnon 2004; Maritz & Prinsloo 2015).

There are many models of doctoral supervision. According to classification by supervisor's composition, the supervision model can be broadly divided into the traditional model (one supervisor) and panel supervision.

The traditional supervision paradigm was derived from a one-to-one basis model, called an 'apprenticeship' paradigm, when doctoral students were chosen, and students' projects matched with the supervisors' knowledge. Doctoral candidates were supervised by only one supervisor who provided all supports during the whole supervision process (Manathunga & Goozée 2007; Watt 2016). In this supervision model the emphasis was on supervisors' authority (Balatti & Whitehouse 2001; Halse & Bansel 2012). The argument regarding the power relationship in this model includes both positive and negative aspects. The positive doctoral supervisor-student relationship provides the trainees with many learning opportunities for improving their skills. However, the negative apprenticeship may form the 'master-slave' relationship, which reduces the training purposes for doctoral students (Damrosch 2006).

This traditional supervision paradigm had been substituted gradually by the paradigm of “dual supervisors” and “panel supervision”, particularly in Western countries, such as Australia. This paradigm has two main contributions to effective doctoral supervision. One contribution is in focusing on improving the knowledge delivery, because “two heads are much better than one” (Cullen et al. 1994). “No one supervisor has all of the expertise that is needed for supervision” (Green, P & Bowden 2012, p. 69). The other contribution is good for students’ management especially when a supervisor is absent (Cullen et al. 1994). More detailed discussion of the advantages of panel supervision is introduced in Section 3.2.3.

On the basis of the classification by the training targets, “doctoral supervision focuses on two key dimensions: technical and social support” (Doloriert, Sambrook & Stewart 2012, p. 734). Gatfield (2005) further pointed out that supervisors’ styles could be divided into two categorizations. Structure and support usually provided in the technical guidance focusing on research projects, such as writing skills and research design. Support is often offered for social intercourse as academics. Recent studies (Crossouard 2008; Manathunga 2015) showed that group supervision happens more frequently and was more common in the scientific field. The supervision in groups, such as peer support and structured group activities, could assist students to “break down the isolation” during the learning process (Manathunga 2015, p.119).

In recent years, one newer broad model of supervision is recognised. This model is a kind of group supervision with only one supervisor and some students (Bitzer & Albertyn 2011; Guerin, Kerr & Green 2015). This model is derived from the lab group model, and the majority of traditional lab models are popular used in the Science field (Guerin, Kerr & Green 2015). Due to the influence from the academics’ time pressures, this model is suitable for the supervisors, who effectively supervise the larger groups of doctoral students obtaining the benefits through the peers group’s assistance (Guerin, Kerr & Green 2015).

Supervision is a complex process. One set style of supervision is no longer acceptable for all doctoral supervision (Pearson & Brew 2002). Plenty of scholars agree with this point of view (Balatti & Whitehouse 2001; Boehe 2016; Erichsen, Bolliger & Halupa 2014;

Green, B & Lee 1995; Guerin, Kerr & Green 2015; Johnson, D 2005; Roets 2016; Wright, Murray & Geale 2007). They further indicated that there were no universal and precise supervisory styles or doctoral frameworks, which were effective in all doctoral situations. So the pedagogy of doctoral supervision had been thought as “poorly articulated and under-theorized” (Erichsen, Bolliger & Halupa 2014, p. 321). The reason for multiple supervisory styles is to provide better and flexible training for researchers. Supervisors adjust their supervisory style to promote the final goals during the doctoral training programme (Boehe 2016). Based on this situation, the supervisors need to have the capability to find the points which balance students’ demands and personal supervisory styles (Boehe 2016; Malfroy & Webb 2000).

The purpose of this research is to establish a theory of cultural custom and policy practice of China influencing doctoral supervision. Through reviewing the different modelling of doctoral supervision as above stated, the ideal of the theory, which will be built up in this thesis, should explore how the cultural custom and policy practice of China:

- influences doctoral supervisors’ responsibilities and strategies;
- impacts on the daily doctoral practices; and
- influences to motivate students undertaking and continuing their doctoral degrees.

The ideal theory in this research will further provide what Chinese doctoral supervision looks like, how doctoral supervisors supervise their candidates in China, and also give a reasonable explanation why this style of doctoral supervision successfully embeds in the Chinese context.

As outline above, within the Chinese context, there are not many supervisors, especially in the Management discipline, which is a new and popular discipline in China in recent years compared to other disciplines. Many Chinese doctoral supervisors had to supervise more than 30 students at the same time (People 2006). Although in recent years, the ratio of the number of students to supervisors reduced, the good supervisors in the popular majors, particularly in the Management discipline in recent years, were still very busy coping with supervising the large number of doctoral students during the same period (Chen, Z 2015).

Therefore, this research focuses on exploring a theory of cultural custom and policy practice of China influencing doctoral supervision in the Management discipline in China. In order to understand this research within the Management background, the following section briefly provides information of the Management discipline within the Chinese context.

The following three sections outline the main concepts of three main elements of supervision, including doctoral supervisors (Section 3.2), PhD students (Section 3.3), and the other factors in the academic environment (Section 3.4).

3.2 The factors related to doctoral supervisors

As introduced above, there are different meaning between supervision and supervisors. This section focuses more on providing the information on doctoral supervisors. At the doctoral level in international studies, the term of supervisor is generally “used in most of Europe, the UK and countries” based on the UK model (Taylor, S, Kiley & Humphrey 2018, p. 2). Elsewhere, the term of advisor is used: “particularly in the US and the countries with systems based upon that model” (Taylor, S, Kiley & Humphrey 2018, p. 2). There are also some other terms, such as “instructor, tutor, supervisor, and mentor” popularly used to describe the faculty members who contribute to the doctoral supervision (Kumar, S & Johnson 2017, p. 203). Within the Chinese context, although the higher education and academic system had transferred from the former Soviet patterns to modern US model (Huang, F 2017), the term of supervisor is used in the academic system in contemporary China (Yang, Z & Zhang 2008; Zhang, Q et al. 2009).

The doctoral supervisor, as one of the main factors of doctoral supervision, contributes to the successful doctoral program. Many international studies highlighted that doctoral supervisors play a vital role for students’ successful and timely PhD completion, determining the quality of students’ outcomes, influencing doctoral candidates’ development in both research activities and in their career path, and maintaining a low attrition rate among doctoral candidates (Agu & Odimegwu 2014; Golde & Walker 2006; Halse 2011; Ismail, HM, Majid & Ismail 2013; Lee 2008; Meng & Lian 2009; Wang, Y & Liu 2002; Wisker et al. 2010; Zhao, J 2005). Hu (2004) supported this view in his research, which was an investigation focusing on the doctoral students from ten

universities within the group of Projects 985 Universities in China. Hu (2004) reported that more than four-fifths of students strongly agreed that their supervisors provided valuable guidance, and that supervisors were the most important people for doctoral students in the whole supervision process. The results from research in Nanjing University (in China) also reported that the doctoral supervisor was the most important factor to influence their PhD students development, which presented in different aspects: the completion of the PhD dissertation, discussing research methodology skills, and shaping the academic standardization (Zhang, S & Pei 2009).

The doctoral supervisor is usually a representation of the faculty for the doctoral students. In some countries, such as Germany and UK, the senior scientists assumed responsibility for supervision (Buttery, Richter & Filho 2005). Many institutions expected supervisors to be responsible for many things, including applying for funding, choosing topics with their students, seeking teaching and practicing opportunities, determining the training approaches and controlling completion times (Dann 2008; Emilson & Johnsson 2007; Green, DH 2008; Park 2005), and “providing academic guidance to students at all stages of candidature” (Taylor, S, Kiley & Humphrey 2018, p. 24). Supervisors were expected to provide many benefits to their students and to contribute more to the structural design and practical operation of doctoral education (Boehe 2016; Kehm 2008). Within the students perspective, Li (2016, p. 756) supported Kehm’s view and he reported that doctoral students expected to “receive academic support from supervisors to help them with formulation of research questions, discipline and discourse knowledge and writing conventions, academic norms, research philosophy and methods, critical reading and writing, and thesis structure and organisation”.

However, supervisors as academics, who satisfy the eligibility to supervise doctoral candidates, usually have a really high workload, which involves teaching, working on their own research, and supervising students in different degrees, such as honours, masters and doctoral degrees (Askew et al. 2016). The results from Askew’s case study at the University of Auckland showed that “all participants believed that supervision was additional to their current workload. Those who were significantly unhappy with the workload were largely those who supervised a ‘few’ students with only two of those supervising ‘many’ raising concerns about workload” (Askew et al. 2016, p. 4).

Based on this situation, recognition by universities of the value of doctoral supervisors, particular during the process of supervision, can positively affect doctoral supervisors to embark on doctoral supervision (Askew et al. 2016). Simultaneously, the responsibilities of doctoral supervisors had been shaped by their university context, involving university policy and funding (Boehe 2016; Wright, Murray & Geale 2007). Therefore, doctoral supervisors should understand the responsibility and recognise any policy reform in time to effectively supervise PhD students, because some detailed responsibilities may vary subtly in different universities. For example, Tsinghua University required that doctoral supervisors encouraged their candidates to do be creative and innovative (Tsinghua University 2017). The policies of PKU definitely demonstrate the varied responsibilities between doctoral supervisors and PhD students in particular departments. For example, supervisors in this university should institute the planning time schedule for the students, the numbers of publications, the direction of the research project, and regular checks of the students' study or work process every three to five months. They should follow this strict implementation of university policy to ensure the quality of the PhD dissertation (Peking University 2009).

Doctoral supervisors generally have two main essential responsibilities/functions. Firstly, doctoral supervisors need to support the students' research projects (Collins 2015; Ismail, HM, Majid & Ismail 2013; Taylor, S & Beasley 2005). They are in charge of guiding students to complete their doctoral dissertation. Supervisors need to make sure their students' work well and their outcomes satisfy the evaluation criteria of the university (Collins 2015; Delamont, Atkinson & Parry 1997; Ismail, HM, Majid & Ismail 2013; Leshem & Trafford 2007). Under this function, doctoral supervisors are regarded as knowledge experts which means supervisors need to master relevant research knowledge and basic research skills. Therefore, supervisors can act as a knowledge bank and provide the solutions for their students (Frischer & Larsson 2000; Ismail, HM, Majid & Ismail 2013; Pearson & Brew 2002; Wegener & Tanggaard 2013). In order to successfully complete this responsibility, a supervisor needs to be teacher, mentor, supporter and coach for getting the thesis done (Collins 2015; Evans & Green 1995; Evans & Pearson 1999).

Secondly, doctoral supervisors have the responsibility of supporting the candidate, which includes performing daily management and monitoring, and personal support, such as students' career support (Collins 2015; Taylor, S & Beasley 2005). In China, according to the regulation of reform policy of postgraduate education since 2007, Chinese supervisors need to be in charge of the responsibility of improving the students' academic level and management skills. Chinese supervisors also need to provide certain extra supporting funds from the university for their students. The purpose of this policy is that doctoral students' research topics should match with the doctoral supervisors' current on-going research projects, which means that supervisors without projects will lose the opportunities to supervise doctoral students (Wu, Y 2008).

Based on the different kinds of supervisors' responsibilities, doctoral supervisors need to rapidly and accurately identify the different needs and requirements, combining the government background, university context and individual doctoral student characteristics. Then in order to design and carry out a reasonable training program, supervisors provide students with the necessary conditions and try to remove the barriers to successful completion (Denholm & Evans 2007). During the supervision process, supervisors need to play multiple-roles in supervision.

Vilkinas (2002) modified the competing values framework (CVF), which was a management framework proposed by Robert Quinn (Quinn & Rohrbaugh 1981) for explaining various managerial models. The CVF model indicated that the doctoral supervisor as a manager had eight roles: "innovator, broker, producer, director, coordinator, monitor, facilitator, and mentor" (Vilkinas 2002, p.131). Vilkinas successfully applied this model to the PhD supervision process and then developed this model through adding the ninth role: "process" / "integrator" to form a new model: the integrator competing values framework (ICVF) for academic supervision (Vilkinas 2002, p. 132). Then Vilkinas and Gartan (2006) further tested the ICVF model in 2006 through an investigation with feedback from 100 middle managers located in organisations in Australia. The result from this study indicated in terms of two dimensionality of 'People-Task Focus' and 'Internal- External Focus', the roles of managers to consist of six aspects: mentor, facilitator, deliverer, monitor, broker and innovator. The result was different with the original ICVF model, which makes the three roles: producer, director and coordinator,

form to a new role called the deliverer, which may result from the different organisational cultures (Vilkinas & Cartan 2006). Furthermore, Vilkinas (2008, p. 302) determined how the doctoral supervisors supervised their doctoral candidates throughout analysis of the data from twenty-five interviews, mainly task focused. ICVF indicated how these roles linked to each other in this research; Vilkinas identified six roles: developer, innovator, monitor, broker, deliverer, and integrator.

A good supervisor has been often characterized by:

- knowledge and experience (Collins 2015; Ismail, HM, Majid & Ismail 2013; Wisker et al. 2010);
- “a good communicator” (Collins 2015, p. 594);
- providing positive and encouraging feedback (Cullen et al. 1994; Delany 2009; Hockey 1991; Ismail, HM, Majid & Ismail 2013; Overall, Deane & Peterson 2011; Wisker et al. 2010; Zhao, Golde & McCormick 2007);
- availability (Overall, Deane & Peterson 2011);
- providing emotional support and students feeling valued and accepted (Hockey 1991; Zhao, Golde & McCormick 2007);
- providing network and opportunities, among others (Ismail, HM, Majid & Ismail 2013; Wisker et al. 2010);
- flexibility (being a flexible supervisor for the different students, different study stages) (Collins 2015);
- “genuine, real, present, and honest” with the person they are supervised (Majcher & Daniluk 2009, p. 66);
- “Not too demanding” (Collins 2015, p. 594);
- “able to accommodate difference” (Collins 2015, p. 594) prepared to acknowledge error (Cullen et al. 1994; Delany 2009);
- “approachable and friendly; supportive, positive attitude, open minded, prepared to acknowledge error; organized and through; and stimulating and conveys enthusiasm for research” (Cullen et al. 1994, p. 6).

On the other hand, bad supervisors can break doctoral students (Erichsen, Bolliger & Halupa 2014; Ives & Rowley 2005; Lee 2007, 2008). Bad doctoral supervisors (or poor supervisors) are described as “catatonic, bigot or slave driver” (Benmore 2016, p. 1252),

lacking support, motivation, effective communication for their students, and leaving students alone and unsupported emotionally (Benmore 2016; Erichsen, Bolliger & Halupa 2014; Wisker & Robinson 2013). The bad supervisors often give students “feelings of abandonment, confusion, disruption and trauma, with their loss of confidence and insecurity hampering their progress” (Benmore 2016, p. 1252).

However subtle differences between good supervisors and effective supervisors exist. In my opinion, an effective supervisor is not equal to a good supervisor. Taylor, Kiley and Humphrey (2018, p. 2) gave a definition of effective:

an effective supervisor is one who enables the candidate to:

- *where appropriate, initiate and plan a research project;*
- *acquire the research skills to undertake it and gain adequate access to resources;*
- *complete their studies on time;*
- *produce a high-quality submission;*
- *be successful in examination;*
- *disseminate the results;*
- *develop the creative, critical and analytical skills and knowledge of a researcher;*
- *lay the basis for their future career.*

Within the Chinese context, the main supervisors’ issue, which results in PhD attrition and delays in PhD student completion, is that supervisors lack energy and time. A Chinese investigation showed that 40 percent of the postgraduates had inadequate supervision, due to lack of time from their supervisors, and 70.7 percent of postgraduates faced the problem that the relationship between supervisor and student was not healthy, due to lack of time for communication (Li, S 2006). Li (2006) further indicated that some supervisors had too many postgraduate students to take good care of each one in the supervision process. An investigation result showed that four main reasons, which led to limited energy and time from doctoral supervisors, included too many tasks of administration work (39.2 percent), external academic communication activities (32.8 percent), research projects (21.1 percent), and personal problems (6.9 percent) (Hu, L 2004). Although Bao et al. (2016) indicated that Chinese universities and academic institutions started to provide more opportunities for the younger researcher to be the member of the supervision group or to be a co-supervisors in recent years, particularly in Science areas, the issue of the limited energy and time from the main supervisors still existed.

To sum up, this research focuses on the practice and action of doctoral supervisors in China, and mainly explores what supervisors do and why they do it. Supervisors play vital roles to make or break doctoral students during the whole doctoral supervision procedure. So, the supervisor is regarded as an element to influence effective doctoral supervision. The main characteristics of doctoral supervisors include supervisor-student relationships, supervisors' personal attitudes, supervisors' working styles, and supervisors' experiences and specialist skills, which will be introduced in the next sections.

3.2.1 Supervisor personal attributes

Supervisor's personal attributes, such as supervisor's characteristics and personality, are important factors which can influence the quality and efficiency of supervision (Buttery, Richter & Filho 2005; Collins 2015; Zuber-Skerrit & Roche 2004). Collins (2015) showed the results in his study that "all participants felt that the personality of the supervisor was the most important factor in supervision; more important than academic history, publication or experience" (Collins 2015, pp. 593-4).

Within the supervision in the field of doctoral education, supervisors' ethical principles consist of respect, beneficence, justice and fidelity (Löfström & Pyhältö 2017). Firstly, a supervisor should begin from the respect for students and students' autonomy, which positively influence the students' progress and productivity (Löfström & Pyhältö 2014, 2015). Löfström & Pyhältö (2017, p. 233) defined that "respect for autonomy refers to the right to self-determination, the right to privacy and the right of individuals to make decisions concerning their lives". If the doctoral students lack autonomy, it might result in serious problems for students' research progress in the early stage and the students' early academic careers (Löfström & Pyhältö 2014). As the safeguard of respect for students' autonomy, doctoral supervisors should be real and honest people and avoid cheating and dishonesty in the supervision process (Carroll 1996; Page & Wosket 1994).

Secondly, beneficence is defined as "making a positive contribution to another's welfare and personal growth" (Löfström & Pyhältö 2017, p. 233), and providing the help or support to promote others' development through kindly, merciful and charitable acts (Löfström & Pyhältö 2014, 2015). Leaman (2008) found that supervisees gained effective

supervision by the supervisors who were more concerned with students. During the doctoral supervision process, the beneficence includes supervisors' concern for their students' welfare (Ismail, A, Abiddin & Hassan 2011), and students' demands in both academic and life areas. In addition, supervisors need to have positive attitudes towards people. This means that supervisors believe that people expect to be involved in relevant projects and tasks. Supervisors are willing to delegate and provide the opportunities to do the interesting and challenge tasks (Löfström & Pyhältö 2014).

Thirdly, justice involves "fairness, impartiality, reciprocity, and equality" (Löfström & Pyhältö 2015, p. 2724). The duties of doctoral supervisors on justice mainly involve treating students with fairness and equity. Many supervisors struggle with two 'rules'. One 'rule' is that they need to assign the same time and provide the same support to each student (Löfström & Pyhältö 2015). The other 'rule' is that supervisors need to allocate the most time for supporting their students to solve the urgent problems (Vehviläinen & Löfström 2016). Supervisors need enthusiasm and commitment to support their students to successfully complete their research processes (Buttery, Richter & Filho 2005; Ismail, A, Abiddin & Hassan 2011). Providing positive attitudes and being interested and enthusiastic for the students' jobs can increase students' satisfaction and productivity. On the other hand, ignorant or little research interest in students' research increases students' discontent (Krauss & Ismail 2010). Deuchar (2008) provided the possible reason for this conflict. That was because different supervisees had different needs in supervision. So supervisors needed to provide different support based on students' demands. Furthermore, doctoral supervisors need to work with people within non-sexist, non-prejudiced, and non-authoritarian attitudes (Butterworth, Faugier & Burnard 1992). Saville (1985) also showed that supervisors should be fair in treating every supervisee, instead of only doing a favour to a certain person. For example, there are no clear rules on assignment of authorship in many universities; when supervisors, as co-authors, published with their students, they need to concern assignment authorship following the principle of justice (Löfström & Pyhältö 2014). Löfström and Pyhältö (2014) suggested that the characteristic of tolerance might be a key factor to promote equity, and then doctoral supervisors were expected to be tolerant. "Tolerance does not mean that people are expected to change their belief system but rather to behave according to ethical codes of conduct; although change is important". Löfström & Pyhältö (2014, p. 210) argued that "promoting

tolerance sets up standards of fairness in a more immediate and faster way than if we waited for all people to change their core beliefs.”

In addition, there are also some other supervisors’ personal attributes including non-maleficence and fidelity (Löfström & Pyhältö 2017). “Non-maleficence entails the necessity of avoiding psychological, physical or social harm” (Löfström & Pyhältö 2017, p. 233). Fidelity is the foundation of remaining in good relationships with others. Fidelity consists of “keeping promises”, “showing truthfulness and respect for others” (Löfström & Pyhältö 2017, p. 233).

Chinese education pays much attention to *pinde* education, which has been introduced in Chapter 2, even at the stage of doctoral education (Li, S 2006). Supervisors’ *pinde*, values, and attitudes can impact on students’ attitudes and behaviours, especially in young and full-time students throughout the three years training process (Chen, C & Gu 2001; Miao 2003). Meng and Lian (2009) explained that a good supervisor needed to have responsibility for caring for students in both academic and life areas. Therefore, Chinese supervisors need to be aware of supervisees’ *pinde* education.

3.2.2 Supervisor-student supervisory relationship

Although the contents of the supervisory relationships between supervisors and PhD students cross areas of supervisors’ factors and students’ factors, the relationship types mainly depend on doctoral supervisors. Therefore, I introduce supervisor-student relationships in Section 3.2: The factors related to doctoral supervisors.

The supervisory relationship is a particular form of relationship. The supervisory relationship is described in different ways, as hierarchical, or purposeful, or respectful or professional (Benmore 2016; Jackson 2008; Jackson et al. 2009), “through which complex changes in the student’s identity are played out through inevitable shifts in power between student and supervisor” during the supervision process (Benmore 2016, p. 1252).

Developing positive supervisory relationships is important for both doctoral supervisors and students’ academic development (Collins 2015; Cornér, Löfström & Pyhältö 2017; Lee 2007; Marland, Lyttle & Paul 2003; Waghid 2006). Good supervisory relationships are regarded as the backbone of doctoral supervision programs (Vanstone et al. 2013).

Collins (2015) further emphasised that a positive supervisory relationship was more important than the doctoral process. The effective (or good) supervisory relationship between supervisor/ supervisory team and supervisee was the heart of the successful completion of PhD program. It could contribute to a high quality dissertation, and increase students' successes and satisfactions (Collins 2015; Erichsen, Bolliger & Halupa 2014; Ismail, A, Abiddin & Hassan 2011; Ismail, HM, Majid & Ismail 2013; Lee 2007; Pearson & Brew 2002; Vanstone et al. 2013).

On the other hand, some studies showed that disharmonious and poor mutual relationships between supervisors and supervisees were the central reason for disruption of their doctoral programs (Ives & Rowley 2005). Erichsen, Bolliger and Halupa (2014) reported that the negative supervisory relationships included the following seven aspects:

- “lack of communication/response/feedback on the part of the supervisor” (Erichsen, Bolliger & Halupa 2014, p. 329);
- “the distance between the students and the supervisor” (Erichsen, Bolliger & Halupa 2014, p. 329);
- “lack of direction provided by the advisor” (Erichsen, Bolliger & Halupa 2014, p. 329);
- “lack of connection and or personal relationship with the supervisor” (Erichsen, Bolliger & Halupa 2014, p. 329);
- lack of support from supervisor (Ismail, HM, Majid & Ismail 2013);
- “difficulties related to changing supervisors” (Erichsen, Bolliger & Halupa 2014, p. 329); and
- “needed more time from advisor” (Erichsen, Bolliger & Halupa 2014, p. 329).

What is the positive relationship between supervisor / supervisor team and student? Positive relationship are summarized as the following:

- an essentially hierarchical and purposeful relationship (Jackson et al. 2009);
- a mutually respectful relationship (Benmore 2016; Jackson et al. 2009; Petersen 2007);
- a reliable and encouraging relationship (Collins 2015);

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- a relationship “shaped by the supervisor’s ability to respond to individual students’ needs” (Benmore 2016, p. 1258);
 - a complex and dynamic relationship (Collins 2015; Löfström & Pyhältö 2014); and
 - a friendly and professional relationship (Benmore 2016; Wisker 2005).

Although Wisker (2005, p. 41) described that a good supervisory relationship was a kind of friendly relationship, we needed to consider whether a positive relationship means friendship. Jackson et al. (2009, p.90) recognised that the “trust and rapport that exists within a functional student-supervisory relationship provides the ultimate foundation for future and successful working partnerships”. In Halse’s study in 2011, one of the supervisor interviewees emphasised to remain in a professional relationship with students, because this supervisor did not “have the time or want to be a student's mother, counsellor, confidante or friend” (Halse 2011, p. 565). Some scholars supported this view, that “a good relationship did not necessarily imply friendship at the beginning” and in the middle stages of the supervisory process (Lee 2008, p.275).

Some interviewees from Ives and Rowley’s (2005) research further noted that friendship could obstruct a good supervisory relationship, because of reducing the power dynamic. On the other hand, from the students’ perspective, they expected “their supervisors to be concerned about them as persons in both personal and work-related ways” during the whole supervision process (Löfström & Pyhältö 2015, p. 2734). Although friendship might cause many difficulties in the early stages of the doctoral process, it occurred frequently for some doctoral students and supervisors, after students graduated (Lee 2008).

Doctoral supervisors play vital roles to maintain supervisor-student supervisory relationships. Chinese doctoral supervisors recognise the importance of remaining in a good relationship, as well as to balance between power and friendship for effectively supervising PhD students. Within the Chinese context, the influence of Confucian culture emphasises respect for supervisors. The traditional teacher-student relationship was similar to the father-son relationship (Chen, C & Gu 2001). In recent years in China, with the increase of doctoral supervisors’ power which had been shown in both academic authority and emotional authority, a new relationship had been formed. Most doctoral

students call their supervisors ‘bosses’ which implies the work-relationships formed between supervisors and students (Chen, C & Gu 2001; Wan, Y 1993).

3.2.3 Experienced and specialist skills (knowledge)

This section introduces the experience and specialist skills. Firstly, supervisors’ experience and resources are presented. Then the supervisors’ specialist skills, such as supervisors’ knowledge are discussed later.

Experienced and resourced

Gu et al (2010) argued that in China the more experience and good-resources supervisors have, the more opportunities existed to provide effective supervision to their doctoral students. Some scholars indicated that although supervisors’ age and experience did not have the linear relationship, in general the supervisors who had similar age would have varied experiences. The older supervisors implies the more experienced supervisors had “more patience and social skills than the younger” (Gu, J et al. 2010, p. 490). Some other studies pointed out that more senior academic staff and more experienced supervisors seemed to increase the students’ satisfaction and make good supervision (Collins 2015; Lee 2008; McCallin & Nayar 2012; Neumann 2003; Rodwell & Neumann 2008). Although “solely on one’s own experience to fuel future supervisory pedagogies” within the contemporary doctoral education system which keep continuing to change, some effective models exist based on some supervisors’ prior experiences (Guerin, Kerr & Green 2015, p. 116). Manderson (1996) found that experiences were more important than knowledge for effective supervision, because one of the key functions of supervisors’ helped and support to their research students is to learn how to learn. Lee (2008) further indicated the advantages of following experienced doctoral supervisors. Lee (2008) believed that students could successfully enlarge their knowledge, develop their skills to arrange and complete their research studies, through working with more experienced supervisors, who provide effective advice and information.

On the other hand, inexperienced supervisors are one of the reasons reducing successful PhD supervision. In recent years, some scholars also indicated that some new doctoral supervisors had limited or have no systematic training for the preparation of supervision role (Amundsen & McAlpine 2009; Peelo 2011; Turner 2015). Although “experience is the hardest kind of teacher. It gives you the test first, and the lesson afterwards” (Roets

2016, p. 7167), the disadvantages of inexperience could be made up by training. Lee (2007) pointed out that many of PhD supervisors, who were not trained via a formal process, would directly duplicate the good experience or avoid following the bad experience of the way they were supervised by their supervisors as PhD students (Lee 2007). Thus “without formal training, candidates who received poor quality supervision will be at a disadvantage in preparation for becoming supervisors and might be more likely to perpetuate poor supervisory practices” (McGagh et al. 2016, p. 88).

Specialist skills (knowledge)

A knowledgeable supervisor is an important part of good supervision (Collins 2015; McCallin & Nayar 2012; Neumann 2003; Rodwell & Neumann 2008). Good doctoral supervisors should be experts in their particular areas, and they should be similarly orientated in research background or research method with their students (Collins 2015; Halse 2011; Ismail, HM, Majid & Ismail 2013; McCallin & Nayar 2012). This similar background is important because supervisors’ power and expertise relies on their knowledge (Boehe 2016; Lee 2008). Benmore (2016) agreed, and a supervisor interviewee, participating in her study, explained:

The student has to trust you as an expert...that you have their interests at heart...they are relying on your expertise to guide them to where they want to be... you have to demonstrate that they are quite right to place their trust in you through your action across the relationship (Benmore 2016, p. 1258).

Lee (2008) used a metaphor to describe how the supervisors themselves looked. Supervisors look like the “family doctor”. “They will provide some specific expertise, but will also be a gatekeeper to many more learning resources, specialist opinions and networks. The supervisor can choose which gates to open, particularly in the early stages of the researcher’s life” (Lee 2008, p. 272).

Based on the significance of the supervisors’ knowledge background, a good match between doctoral students’ research, and supervisors’ expertise areas and research methods can increase the students’ satisfaction, offering students’ research guidance, “particularly in students locating relevant texts for their writing” (Gube et al. 2017, p. 12), helping “accelerate doctoral students’ process” (Gube et al. 2017, p. 13), and also promoting the students’ successful completion of their PhD progress. The importance of

the match between students' research and supervisors' knowledge and research method has been recognised by some researchers (Benmore 2016; Boehe 2016; Engels-Schwarzpaul 2015; Gube et al. 2017; Halse 2011; Ismail, HM, Majid & Ismail 2013; Ives & Rowley 2005; Maritz & Prinsloo 2015).

Therefore, after reviewing the Western literature, for the stage of selection of a supervisor, students need to be interested in the supervisors' intellectual as well as personal qualities (Boehe 2016; Phillips & Pugh 2000). Ives and Rowley (2005) emphasised that the research area was crucial for good matching between students and supervisors. Boehe (2016) provided views from both supervisors' and supervisee's perspectives. Supervisees are more likely to seek advice from the supervisors who have the similar "expertise in theoretical and methodological knowledge" with students (Boehe 2016, p. 408). On the other hand, "supervisors might be interested in providing his/her supervisees with significant knowledge resources to raise them to the level of a research collaborator eligible of collaborating in future publications" (Boehe 2016, p. 408).

Similarly, in China, the authorities of doctoral supervisors' powers are based on the in-depth and broad professional knowledge (Chen, C & Gu 2001). Profound knowledge is the foundation of effective supervision, especially in the early supervision stage, when the students are not familiar with this discipline and do not have enough research experience (Meng & Lian 2009). Hu (2004) also indicated that more than two-thirds of Chinese doctoral students emphasised that they benefitted the most from their supervisors' specialist skills.

To sum up, the experience and knowledge of the doctoral supervisors are elements related to effective doctoral supervision. Sometimes, completely good matching within all aspects, such as research topic, research method, well-experienced, and well-resourced, seems impossible at the same time for both single supervisor and student, particularly for the student who worked on the across discipline projects. A good approach of coping with this problem, increasing students' satisfaction, and avoiding the breakup of the supervisory PhD program is having two active supervisors or having a supervisory panel (Cullen et al. 1994; Holloway 1995). Pearson (1996) agreed with this opinion and she showed that in Australia, there were higher levels of satisfaction for the students whose research was across disciplines and who have more than one supervisor, rather than the

students with a single supervisor. Nulty, Kiley and Meyers (2009) also indicated that students might prefer to have co-supervisors, who played the variety of supervisory roles, to gain crucial supervisory expertise. Ives and Rowley (2005) further suggested that the supervisory panel members at least include one knowledgeable and experienced supervisor, who could support and provide valuable suggestions and experiences to both inexperienced supervisors and also research students. James (2017, p. 75) agreed with this opinion, and indicated that “some students look for advisors/mentors or role models who are caring and supportive while others prefer strong field or professional expertise”.

Many studies in recent years focus on multiple supervisors (Boehe 2016; Guerin & Green 2013; Kobayashi, Grout & Rump 2013, 2015; Lee & Green 2009; Manathunga 2012; Spooner-Lane et al. 2007; Vanstone et al. 2013; Watts 2010). The advantages of multiple supervisors are obvious (Green, P & Bowden 2012; McGagh et al. 2016). ACOLA reported the “Stakeholders of this Review agreed that panel supervision is superior to one-on-one supervision” (McGagh et al. 2016, p. 89). However, multiple supervisors have disadvantages, such as increasing the uncertainty and tension, and making supervision more complex (Kobayashi, Grout & Rump 2015; Manathunga 2012). The complexity of supervision may result in “a decrease in goal alignment between supervisors and supervisee” and then “lead to “a less-supportive and less-directive supervisory style” (Boehe 2016, p. 410).

In the majority of Chinese universities, supervision still follows the single-supervisor format to supervise PhD student in certain disciplines, and the majority of students prefer to follow the doctoral supervisors who have more experience, more resources and higher reputations. That leads to many PhD students having centralized supervision by few popular supervisors, particularly in the Social Science field. The more PhD students follow these supervisors, the less time and energy can be assigned to each student from these experienced supervisors.

3.2.4 Other Supervisor Skills

Other supervisor skills include effective communication, support, planning, and collaboration. The importance of these four skills are shown during whole doctoral supervision process, during the whole supervision through using different forms of

research activities, four skills from doctoral supervisors, other people involved in students' projects, and doctoral students are important to influence the progress of students' studies.

Effective communication skills

Communication skills are regarded as important to both supervisor and student. Effective mutual communication makes students feel not overwhelmed within the relationship, and the supervisors mostly play the crucial role in this partnership (Ismail, A, Abiddin & Hassan 2011; Lee 2007). Researchers have identified that good communication is a critical element of supervision within the relationship between doctoral students and their supervisors, and successful supervisors should be effective communicators (Ismail, A, Abiddin & Hassan 2011; Ives & Rowley 2005; Lee 2008).

Brown and Atkins (1988) indicated that effective communication with the students or making students connect with the others in similar area could help students develop their skills, such as improving English and writing skills. Wang and Li (2016, p. 102) supported this view and they found that communications and effective feedbacks helped "students to learn about the research process and improve their written work", creating emotional positive impacts for students. Watts (2008) emphasised that establishing and maintaining effective communication was an explicit strategy for supervisors, which could be regarded as an effective way to solve the supervision issue and showed the supervisors' interest in students' research and process. Some researchers (Cornér, Löfström & Pyhältö 2017) indicated that high-frequency or regular contact seemed very important, and regular meetings to be more valuable for the students' doctoral study. Pyhältö, Stubb and Lonka (2009) and Cornér, Löfström and Pyhältö (2017) also emphasised that the frequency of supervision decreased the risk of the candidates' dropout. However some scholars found that "Students did not desire or need frequent contact" particularly in the area of Social Science (Hum 2015, p. 35). On the other hand, without the precondition of supervisors' effective communication, it would be easier to break students' PhD program (Aspland & O'Donoghue 1994; Delamont, Atkinson & Parry 2000).

There are three reasons for the problems in communication within supervision. First, the absence of certain cultural knowledge related to intellectual requirements of PhD and language barriers is one of main issues influencing the smooth communication between students, especially between international students and supervisors (Aspland &

O'Donoghue 1994). Secondly, a collapse in communication results from the disrespect and unbalanced communication power from supervisors. Ineffective communication occurs if the supervisors' domineering style provides little opportunity for their students to explore their ideas (McMichael 1992; Salmon 1992). Thirdly, excessive criticism delivered from supervisors may destroy the students' confidence and self-esteem, which leads to non-completion of the PhD program (Li, S & Seale 2007; Wright, Murray & Geale 2007).

According to work by Xu (2017, p. 240), effective communication needed to focus on three questions: "Where am I going? (feed up); How am I going? (feed back); and Where to next? (feed forward)". The typical Australian supervisor-students meeting is a good example for effective communication. The typical criteria of Australian doctoral supervision follows the four common ways to guide and communicate with their students, that is established by Australia Vice-Chancellors' Committee (Australian Vice-Chancellors' Committee 2005).

- The students submit some written work; after supervisors read, they meet to discuss this work.
- After students submit their written work, supervisors give the student advice and comment via email.
- When students have a problem or an issue which needs to be solved, they connect with supervisor to make an appointment to discuss the issue, or solve the problem by phone.
- Students e-mail supervisor about an issue, then supervisor responds to students by e-mail or meeting.

The types of communication can be divided by two main models: one-to-one interaction, and group-based communication (Cornér, Löfström & Pyhältö 2017). The communication approaches are adopted by flexible technologies, not only focusing on face to face communication. Other communication technologies, include telephone, skype, online conference calls, email, which are more convenient for part-time and distance students (Kumar, S & Johnson 2017; Pearson & Ford 1997; Roumell & Bolliger 2017).

However, varied technical approaches are not always satisfactory for students to do the complex communication and conversation with their supervisors that are needed to successfully complete their PhD (Sussex 2008). Then what is good communication? How to effectively communicate between students and supervisor? Effective communication includes effective listening, offering reasonable feedback and objective suggestions, and providing constructive criticism (Butterworth, Faugier & Burnard 1992; Holloway 1995).

At first, effective and ideal communication is based on attentive, active and sensitive listening, and then can be capable of offering open, frank, objective, trustworthy and constructive comments within the process of bi-directional interchange between supervisors and student (Haksever & Manisali 2000; Hockey 1996a; Sussex 2008). Wang and Li (2016) emphasised that the essential for effective feedback was using the way of clear and open communication. Ismail, Abiddin and Hassan (2011) further discussed the decrease of embarrassment or misunderstanding when both parties were willing to listen attentively (Li, S & Seale 2007).

Secondly, supervisors need to balance the power within the intercommunication process. A series of research shows the unequal power relation within the traditional supervision process between supervisor and student (Conrad 1994; Grant & Graham 1994). However, the power-peer relationship, derived from a US model, is taken up in current supervision (Wisker, Robinson & Shacham 2007). The power-peer relationship can be presented in many activities, especially in the process of communication between supervisor and student. For example, when students have dialogues with their supervisor about research problems, the supervisor cannot ignore the circumstances which could cause embarrassment, such as unpicking the question or without opportunities provided for their students (Li, S & Seale 2007). “Establishing mutual understanding and engaging students in open dialogue will help ease possible tensions stemming from mismatched expectations and miscommunication in the supervisory feedback process” (Wang, T & Li 2016, p. 110). Wisker, Robinson and Schacham (2007) supported this view and they also indicated that supervisors needed to converse with their students in problem-solving dialogue as peers with collegial equals, and the students could undertake and maintain their interest in feasible research.

Thirdly, constructive criticism is necessary to conduct good work and is an essential element to stimulate the intellectual development and capabilities improvement, such as the ability to think analytically. It is supported by several studies (Holdaway, Deblois & Winchester 1995; Li, S & Seale 2007). According to Lessing and Schulze (2002) and Spear (2000), advice was expected by students and should be given by supervisors, after they had read the students' writing. Ives and Rowley (2005) stated that more detailed guidance on advice or feedback could increase the students' satisfaction. Spear (2000) said supervisors commonly provided advice on topic selection, method inquisition, writing style, adjusting work direction and students' general progress. Effective communication through the feedback makes students learn fast and increases students' learning confidence (Xu, L 2017).

The effective communication process between supervisor and student is a good approach to improve and develop the PhD student communication skills, including communicating clearly, listening and understanding, and negotiating persuasively in the PhD supervision process (Meng & Lian 2009). In China, both doctoral supervisors and students recognise the importance of communication in the PhD process. Hu (2004) showed that more than three-fifths of Chinese PhD students decide their final research topic by negotiating well with their supervisors, who needed to consider that this research should to have practicality, and value (Meng & Lian 2009). And in order to help the development and quality of PhD students, more than 80 percent of supervisors maintain regular meetings for good communication with their students (Zhang, Q et al. 2009; Zhang, S & Pei 2009). Therefore, effective communication skills of doctoral supervisors need to be a recognised factor for effective doctoral supervision.

Supportive skills

Research supervision was regarded as providing the support and assistance for PhD students mainly from supervisors (Lee 2008; Pearson & Kayrooz 2004). A number of research reports support this view and emphasise the primary support from supervisors for assisting and guiding their students through the research program (Devos et al. 2017; Ismail, A, Abiddin & Hassan 2011; James 2017; Li, MZ 2016; Roets 2016; Zuber-Skerrit & Roche 2004). On the other hand, the lack of appropriate support, or inconsistent support to the students' expectations has generally psychological aspects, such as isolation and

frustration for students (Malfroy 2005; Watts 2008). Some researchers agreed with this point of view and they further indicated that if the students did not receive the necessary support to assist them overcome the challenges, they possibly faced the increased risks of burnout at least for a time, and even attrition (Cornér, Löfström & Pyhältö 2017).

However different types of support will be accepted by different students depending on the various backgrounds, such as culture, language, race and other matters (Felder, Stenvenson & Gasman 2014; James 2017). The supervisor has two main tasks as a supporter. One basic task, as a part of the responsibility as doctoral supervisors, is they need to offer professional intellectual knowledge and provide a suitable workplace, and also provide information and suggestions of co-supervisory arrangements (Pearson 2000; Pearson & Brew 2002). Ismail, Abiddin and Hassan (2011) supported this concept that supervisors needed to provide help more focused on their research project. Similarly, James (2017, p. 75) indicated that some students prefer looking for the supervisors with “strong field or professional expertise”. For example, supervisors should help their students within the aspects of research content, and methodology (Salmon 1992). Supervisors also need to confirm that their students have the necessary working materials, such as laboratories, office space, photocopying, policy manuals, and PhD handbooks (Gatfield 2005). In addition, supervisors need to also develop, cultivate, and help their students to gain the related research skills (Pearson 2001; Pearson & Brew 2002). In order to improve the students’ intellectual development and acquaint them with career goals, some supervisors supply information to their students on relevant research and professional communities for sharply increasing the professional knowledge, research skills, and also learning about the specialists in this area (Johnson, R 1998).

Because the PhD process is a special time with emotional ups and down for students (Li, S & Seale 2007), another task of supervisors as a supporter is broadening supporting relationships and emotional security (Felder, Stenvenson & Gasman 2014; James 2017; Lee 2008; Pearson & Brew 2002; Wisker, Robinson & Shacham 2007). As a good emotional supporter, supervisors need to provide concordant atmosphere and affirm students’ strengths to make students feel safe to seek help from their supervisor, when the students feel a break their relationships, in their studying, in their abilities or in their personal lives (Agass 2002; Gardner & Gopaul 2012; James 2017; Streat 2000). Aten,

Boyer and Tucker (2007) pointed out that two typical actions from supervisors were facilitator, which included the spirituality area, and model that supervisor could share spiritual self-disclosures with students. Pearson and Brew (2002) indicated that effective mentors are good at compartmentalizing the responsibilities, which needed to be taken between students and supervisors, in order to successfully achieve targets.

Good supervisors need to give their students persistent support at necessary situations and should maintain the students' morale (Gatfield 2005; Ismail, A, Abiddin & Hassan 2011; James 2017). A supervisor needs to offer the basic acceptance and confirmation that students' work is valuable. Successful supervisors should support students to move from being dependent, and having incomplete ability, to being independent and experienced researchers (Lee 2007).

Independence and autonomy are regarded as the final goal and desired outcome of the supervision progress (Maxwell & Smyth 2011; Miao 2003). The purpose of shaping the scholastic identity is to increase the employment marketability as well as build up of PhD students (Maxwell & Smyth 2011). Lee (2008) gave the comprehensive concept of independent researchers and she pointed out that the independence could be presented as five aspects: to implement a work plan in terms of the timetable arranged by themselves, rational assessment of their own work, student autonomy and learning knowledge independently, following the epistemological demand, and demonstrating the proper power to withdraw. Murphy and Wibberley (2017, p. 65) provided the description the feelings of becoming more independent and autonomy with a student perspective as the following shows:

I have had to become more self-reliant and organised. I have become more questioning of colleagues and more confident in standing my ground about something I feel is important. I feel people see me for the parts I can play in research rather than a role I can adopt. I have come to see that research projects can benefit from my contribution rather than me benefiting from the research project.

James (2017) further indicated that the independent researchers could establish professional relationships, including the university professorial connections or the relationships with other students, across the academic systems.

In order to provide effective support to the students towards independence, supervisors need to continuously learn and understand both students' current circumstances (Murphy & Wibberley 2017), such as students' pressures and problems, and their expectations in the different stages (Devos et al. 2017). Changing needs of graduate students could necessarily influence current supervisory practices (Ismail, A, Abiddin & Hassan 2011). After understanding the expectations, the supervisors should balance government criteria, university requirements, the demands of labour markets, and the students' expectations to provide the appropriate and effective support and service to their students.

Providing effective support to students, supervisors should keep a balance in their support between offering too much and inappropriately using the hands-off approach (Li, MS 2016; Murphy & Wibberley 2017; Roets 2016). If the PhD students had problems and then supervisors offered immediate support, then students might be not learn to become independent (Murphy & Wibberley 2017). Pearson and Brew (2002) indicated that students needed to learn a great deal of experiences and abilities and knew themselves in the research progress. However, if supervisors used the hands-off approach, which was the opposite of their students' expectation, students might feel disoriented, isolated, discouraged, depressed or hopeless (Li, MS 2016), which could increase the risks attrition (Cornér, Löfström & Pyhältö 2017). Therefore, in the PhD process, supervisors should balance between student independence and supervisors' input, when supervisors provided support to their students (Lessing, N & Lessing 2004). If supervisors did not provide flexible and proper support and encouragement, when they worried that their students follow serious blind alleys in their research, it might limit their students' research focus and sometimes was not good for the students' independence (Pearson & Brew 2002).

Within the Chinese context, the regulations of the Chinese government and universities showed that independent working skills are also a necessary ability of doctoral graduates (Ministry of Education of the People's Republic of China, 2016d). Zhou (1985) supported this view and he emphasised that supervisors needed to pay much attention to macro guidance for effective development of students independent research.

Planning skills

Planning skills need to show the planning goal, weekly or monthly activities, and the workloads (Gibson 1995). The doctoral supervisors need to coordinate the students'

planning and activities of the research program, depending on each individual case (Vilkinas 2008).

Time schedule and planning is one of the most important tasks for both students and supervisors, which has been recognised by some researchers (Burden & Byrd 2010; Shen et al. 2007; Watts 2008). Lee (2007) and Zuber-Skerrit and Roche (2004) had the similar opinion that a highly organized planning skill was one of the important elements of effective supervision.

A planning schedule of supervision for the months ahead and years ahead, and effective performing in terms of the original plan can bring three benefits. At first, it can help the students shape study patterns, and it also contributes to motivate hard work for the students (Watts 2008). Secondly, planning can give a sense of direction, and enhance the feelings of confidence, security and trust within the relationship between supervisor and student (Shen et al. 2007). Thirdly, the whole planning and subtle specific scheduling can be a good example for accumulation of supervision experiences. Planning can also link other members of the supervision team, and that may benefit future proposals (Shen et al. 2007).

Mapping out planning needs to be accomplished by negotiation between supervisor and student. When the planning decision is made for a student's PhD progress both supervisor and student need to be clear about their own responsibilities, and to make certain what and when the tasks or the events occur. The goal of planning for PhD progress is assisting and making sure students keep studying (Ismail, A, Abiddin & Hassan 2011). Students expect guidance and planning in the light of the time frames. Some students want supervisors to give them the detailed time arrangement, such as meetings schedules, contents of meetings, and due dates for the paperwork to be submitted (Ismail, A, Abiddin & Hassan 2011). Therefore, the planning schedules need to be adjusted and coordinated by supervisors in the PhD process according to the various individual cases (Vilkinas 2008). In order to avoid students' frustration with difficulties in meeting supervisors, supervisors need to arrange times for their student within the periods, especially if supervisors face heavy workloads and are not available for the students (Krauss & Ismail 2010).

There are specific regulations of responsibility of doctoral supervisors in Chinese universities related to PhD students training planning. For example, the importance of planning for training PhD students in PKU is recognised. The doctoral supervisors have appropriate autonomous authority to formulate the criteria of competition and training planning. That is especially presented in the different course designs, requirements of course credits, time limits and the number of publications. Planning is a necessary ability of doctoral supervisors for providing effective supervision.

Within Chinese doctoral supervision, especially in the Management discipline, the part-time students outnumber full-time students, unlike the Science discipline. Faced by two different typical groups, between young full-time students and older part-time students, how supervisors effectively perform time management planning for the different groups needs research attention.

Collaborative skills

The collaborative skills of doctoral supervisors are important to influence supervision outcomes. Doctoral supervision is regarded as a collaborative working process to assist training of PhD students who have been offered the chance to develop the skills and form the scholastic attributes (Wisker, Robinson & Shacham 2007). Within the supervision process, the problem-solving approach means that doctoral supervisors have to have good collaborative skills to cooperate with their students and other relevant staff, such as co-supervisors (Zhou, M 1985).

Collaborative skills are very important to harmonize the relationships between supervisors and students. Communities of practice in doctoral supervision have been commonly adopted in universities. Communities of practice are established depending on the different characteristics of different groups. The trait of communities of practice which distinguishes them from other groups, is that all members contribute to this group, and also share the benefits and outcomes from this workgroup (Wisker, Robinson & Shacham 2007). As time passes, novices within the community by the actions and engagement, grow into participators with full functions, which make this community continue (Lave & Wenger 1999). Zhou (1985) also indicated that supervisors needed to take part in supervisory communities of practice to improve their collaborative skills.

In addition, students' communities of practice benefit for the development of students' skills and shape the study patterns. Wisker, Robinson and Shacham (2007) indicated that the communities of practice could influence students socially and culturally, because it was an effective approach which could help the participants maintain learning motivation, reducing the students' isolation and frustration, and obtaining certain skills or sharing more ideas. On the other hand, low connectedness within student-to-student and student-to-faculty, is not useful to build up a good learning environment and may lead to the PhD students attrition (Terrell, Snyder & Dringus 2009).

As the common initiator, participator, supporter, monitor, or information provider, supervisors need to clarify the purposes and functions of the students' communities of practice, provide information and suggestions to their students. Effective collaboration with different people within the students' community of practice benefits learning, joint activities, instituting the operating patterns, and sharing commitments (Wisker, Robinson & Shacham 2007).

3.3 The factors related to doctoral students

The doctoral student is the other critical element in doctoral supervision. The good progress of the supervisee has been defined as one of the important characteristics of doctoral supervision (Collins 2015; McCallin & Nayar 2012; Neumann 2003; Rodwell & Neumann 2008). Meng and Lian (2009) showed that strict selection of good quality PhD students by supervisors was an important premise to reduce PhD attrition and improve effective supervision within the Chinese context. The factors related to doctoral students include students' pressures, students' expectations, previous research experiences and knowledge backgrounds, previous students' skills, students' personal characteristics and preferred working styles, and other individual factors, which will be introduced in this section.

Firstly, understanding the problems and pressures on PhD students is the premise of solving the student problems, effective matching of work styles between doctoral supervisors and students, and achieving the targets of effective supervision. From the literature, it seems to six main problems face doctoral students as the following show:

- Having broad skills in order to increase their marketability within timely completing of PhD process (Baptista & Huet 2012; Boehe 2016; Hockey 1994b, 1996b; Löfström & Pyhältö 2014; Motseke 2016);
- heavy workload (Motseke 2016);
- publishing conference paper or journal paper (Ismail, A, Abiddin & Hassan 2011);
- balancing life and study (Erichsen, Bolliger & Halupa 2014; Ismail, A, Abiddin & Hassan 2011);
- coping with emotions of isolation and depression (Hockey 1994a; Lee 2007);
- inefficient supervision (Mouton 2001).

Secondly, doctoral students also need to understand the targets which they have to achieve for their graduation. Wisker (2005), and Wisker, Robinson and Shacham (2007) indicated that successful graduates should be offered original, valuable and creative contributions to knowledge. Delamont, Atkinson and Parry (2000) particularly supported this view in the discipline of arts and humanities. Some students in Science have been required to build up their knowledge via the publication of new results, which may delay the PhD students' completion.

Based on learning the requirements, doctoral students need to define their individual expectations and clear their expectations with other supervisory members during the doctoral supervision process. Clearing individual expectations benefits other supervisory members to understand their roles on supervision (Zuber-Skerrit & Roche 2004), and that also benefits all members involved in supervision to well-match working attitudes and styles (Askew et al. 2016; Boehe 2016; Orellana et al. 2016; Turner 2015), to ensure the high quality outcomes of doctoral programs (Boehe 2016).

The students' expectations vary for different students. For example, Li (2016) pointed out that doctoral students had desires to obtain academic support such as research methods, critical reading and writing and the guidance of thesis structure. Pearson and Brew (2002) indicated that research students expected to enlarge their general skills for improving marketability in their career paths, and completing their research degrees in minimum time. The other students' expectations included invitations into supervisors' scholarly

networks (Boehe 2016; Halse & Malfroy 2010) and co-operation in publication with supervisors or other experienced scholars (Turner 2015; Wegener & Tanggaard 2013).

Within the Chinese context, according to an investigation of 227 doctoral students' expectations from ten Chinese Universities, L Hu (2004) indicated that more than one-third (37.3 percent) of PhD students were doing their PhD for gaining degrees, 32.8 percent of students for interest and improving their knowledge, 20.6 percent of students for changing a job, and less than 10 percent of students for meeting the demands of their current job position. For their expected future career paths, almost 70 percent of students wished to become academicians and researchers, around one-fifth of students were looking forward to working in companies and more than 10 percent of students wanted to work for government (Hu, L 2004). In Australia, Cuthbert and Molla (2015, pp. 41-2) cited the article from 'Department of Innovation, Industry, Science, Research and Tertiary Education' (DIISR) (DIISR 2011) finding that "In recent years less than 30% of doctoral graduates took jobs in the academy while the majority were employed in government, business and non-profit organizations where their disciplinary knowledge and skills might not be sufficient".

For the expectation regarding the most important benefit, almost 50 percent of students wanted to improve their problem-solving skills and independent working abilities, one-third of students hoped to enhance their creative thinking ability, and around one-fifth of students aimed to increase their professional knowledge framework. Compared with the Western mode, most Chinese students' learning approaches might be following the rule of deference to muted criticisms, which led to a lack of critical thinking ability (Singh 2009), and deferenced to supervisors' authority, due to the influence of the Confucian culture (Wisker, Robinson & Shacham 2007). Volet (1999) supported this point of view and the results from her study showed that the learner from Confucian heritage culture who then studied in Australia had generally a lower participation in tutorial discussions.

Thirdly, students' previous research experiences and knowledge backgrounds contribute to students' good progress involved in timely completion and high quality outcomes. Tennant and Roberts (2007) supported this view, and also suggested that understanding the students' backgrounds as much as possible was necessary for supervisors to make

decisions in their supervision. That was because students need to be able to solve their own problems involved in their progress (Watt 2016). If the students were at the stage of 'troublesome knowledge', that would hinder the students' research progress (Ismail, HM, Majid & Ismail 2013; Perkins 2006). Otherwise, "if the student was lacking ... knowledge required it added to the supervisor's already heavy workload" (Askew et al. 2016, p. 5). Lessing and Schulze (2002) emphasised that the previously disadvantaged students might directly influence the students' special demands to achieve the requirements of independent researchers.

Fourthly, students' prior skills also influence the supervision. Lacking necessary skills can add to supervisors' workloads (Askew et al. 2016), prolong students' studies (Löfström & Pyhältö 2014), and break up the supervisor-student relationships (Löfström & Pyhältö 2014). For example, if the doctoral students' English is the second language, many supervisors need to become these students' editors "which added to the workload" (Askew et al. 2016; Watt 2016). Another example is that doctoral students need to have clear and succinct communication with their supervisors (Wisker, Robinson & Shacham 2007). Miscommunication breaks up relationships between supervisors and students, impacts on supervision outcomes, and increases drop out. Successful PhD graduates need to have the related skills, such as "research skills and techniques; participation in research environment; research management; personal effectiveness; communication; networking and team working; and career management" (Baptista & Huet 2001, p. 255). Therefore, the more skills students already have, the less skills development will be needed during the whole PhD process, because students' previous skills can influence the students' progress, completion time, and the achievements of graduates' skills targets.

Fifthly, different students' personal characteristics may directly influence students' preferred working styles, and this impacts on supervision. Supervisors and other members involved in supervision need to learn the student's personal characteristics and preferred working styles, and then plan the training program depending on each individual case. Successful PhD graduates should own the scholastic identity, especially a psychological component, which includes tenacity and determination (Phillips & Pugh 2000; Smith & West-Burnham 1993), enthusiasm (Kiley 2007), ability to 'cope with failure and success' (Kiley 2007, p. 122), perseverance (Overall, Deane & Peterson 2011; Phillips & Pugh

2000; Smith & West-Burnham 1993), independence (Löfström & Pyhältö 2014; Overall, Deane & Peterson 2011; Wissler 2007), and confidence (Wisker, Robinson & Shacham 2007).

Finally, other student issues also will slow down or influence doctoral progress, supervision process, and students' satisfaction. These issues include ill health (Ives & Rowley 2005), age (Gu, J et al. 2010), gender (Beqiri, Chase & Bischka 2010; Erichsen, Bolliger & Halupa 2014; Grant & McKinley 2011), ethnicity (Ellis 2001), culture (Bravo, Saint-Mleux & Dubois 2007; Winchester-Seeto et al. 2014), language (Askew et al. 2016; Ismail, A, Abiddin & Hassan 2011), family status (Beqiri, Chase & Bischka 2010; Erichsen, Bolliger & Halupa 2014; Gu, J et al. 2010), and full-time or part-time study mode (Erichsen, Bolliger & Halupa 2014). For example, “being a full-time student and writing an article-based dissertation provides more opportunities to engage with members of the researcher community and to benefit from several sources of feedback than writing a monograph and studying part-time” (Cornér, Löfström & Pyhältö 2017, p. 102).

In addition, the elements linked with doctoral students during the whole doctoral supervision need to be recognised to embed into the Chinese background. For example, due to the traditional Chinese beliefs' influence on gender, in China, Gu, J et al. (2010, p. 497) found that “males have higher motivation to complete advanced education, such as a PhD degree. On the other hand, most women focus more on social responsibilities for taking care of the family. As a result, most women have to abandon their hopes for accomplishing a PhD degree”. Furthermore, due to the influence of special culture and policies, Chinese doctoral students look likely to receive more influence on their studying decisions from their parents. For example, most Chinese parents “focus on students' learning performance, and take this as key criterion for evaluating students' success. As a result, students put much effort into attaining high scores in tests” (Gu, J et al. 2010, p. 498). And another example:

In China, youngsters' foremost mission is to acquire degrees to fulfil their parents' expectations. Most students (51.5%) are not married because they use their efforts and resources to gain knowledge and skills, instead of getting married. Those who are married may delay the birth of their babies so that they can concentrate on their PhD studies. Therefore, in the samples there is no significant difference in time spent in research activities (Gu, J et al. 2010, p. 497).

Therefore, in order to effectively supervise PhD students, doctoral supervisors and relevant members involved in doctoral education need to adequately understand their students' situations and problems in different research stages, particularly within the Chinese context. There are only limited literature on the factors lined with doctoral students within the Chinese contexts. This section reviewed the factors related to doctoral students include their pressures, the expectations, the backgrounds of prior research knowledge, previous research skills, personal character and preferred styles, and other individual factors, that mainly focused on Western literature. That would be helpful to find how the cultural custom and policy practice of China influence doctoral supervision within the Chinese context.

3.4 Other factors in the academic environment

This section reviews other relevant supporters involved in students' studies and research activities in the academic environment, which may influence doctoral supervision.

3.4.1 Other supporters involved in students' studies in academic environment

Although the benefits of individual supervisors have been paid much attention in doctoral supervision, the meaning of supervision is more than this sole relationship and relevant activity (Grant & Pearson 2007; Watt 2016). Supervision emphasises the roles and functions of the research community, which can provide important supervisory resources (Löfström & Pyhältö 2014). An effective research community, which is linked to reducing the risk of the candidates' burnout (Cornér, Löfström & Pyhältö 2017), is the second most important element which, after the supervisor factor, has a huge impact on students (Zhang, Q et al. 2009). Maritz and Prinsloo (2015) agreed with this point of view and they further pointed out that the quality of the supervision were strongly associated with the quality of the faculty. Some scholars further indicated that the more chances they participate in academic activities involved in the research community, the more expected students like to learn (Gardner 2008; Löfström & Pyhältö 2014; Pyhältö, Stubb & Lonka 2009) and the quicker students' progress to personal growth and completion (Watt 2016; Winchester-Seeto et al. 2014). The other members involved in doctoral supervision include: other academic scholars, who are usually from the same departments or similar

disciplines to the doctoral students, administrative staff, librarians, and peers (Löfström & Pyhältö 2014; Winchester-Seeto et al. 2014).

Other academic staff are usually from the similar discipline backgrounds to the PhD students within a narrow sense. In broad sense, other academic staff include the people who have related experiences and projects with doctoral students, and who are involved in group actions or formal training programs (Pearson & Ford 1997). Administrative staff can provide effective human services for doctoral students, especially for students who are not studying on campus. Some administrative staff can effectively monitor the supervision process (Pearson & Ford 1997). Librarians are one of the factors influencing effective doctoral supervision. Good services from librarians can assist the doctoral students to obtain resources and make these resources more available (Halse 2011; Pearson & Ford 1997). For example, librarians can offer the services of electronically and inter-library loans for doctoral students.

Other PhD students also can provide important relevant experiences and influences for students' individual development. Grant and Pearson (2007) and Li (2006) pointed out that peers who were from the group activities, such as reading groups and writing groups, built up by and composed of PhD students, contributed to the supervision by the interacting communication. Many other scholars found that peers provided many contributions, such as developing their writing skills (Roulston et al. 2016), understanding the peer-review process for publishing (Roulston et al. 2016), support for solving specific problems (Devos et al. 2017), enlarging the networks and decreasing isolation (Devos et al. 2017; Guerin, Kerr & Green 2015; Kumar, S & Johnson 2017). Although, peers contributed a lot during the PhD Journey, some scholars found that the peers have only limited influence on the candidates' final outcomes. For example, Devos et al. (2017, p. 73) pointed out that "peers have little control over the students' dissertation content. They usually have a limited impact on the students' progress with their work".

Within the Chinese context, Chen and Gu (2001) explored that PhD students, who were supervised by the same supervisor [Called *tongmen* (同门)²¹]. Chinese doctoral

²¹ In the future, I will simply use pinyin of *tongmen*.

supervisors assist new students to build up the trust relationship with other *tongmen*, who began their PhD earlier, because *tongmen* play the vital roles during whole process of doctoral supervision. In China *tongmen* have more chances to participate in the group activities together. And then the majority of *tongmen* have closer relationships and they have more mutual influence in the supervision process. As the significant group members, *tongmen* are important to assist others to provide the emotional support, improve their *suzhi*, shape good *pinde*, and form leadership styles during whole doctoral supervision process.

3.4.2 Research activities

The useful resources and approaches provided by universities and supervisors include the doctoral curriculum and other relevant social activities. The formal and structural training programs, which focus on the training of systematic knowledge, skills and research methodology, are offered at departmental level through coursework, seminar and workshops.

Coursework is popular in the PhD programs in North America, Europe and some Asian countries (Kiley 2014), and coursework is one of the formal training approaches that brings many benefits for achieving the target on specific research skill-set for doctoral candidates (Gube et al. 2017). Coursework is generally divided into three forms: “subject area and interdisciplinary courses; research methodology and research ethics courses; and professional skills courses” (Cuthbert & Molla 2015, p.44). However, coursework is not always involved in the pattern of PhD training. For example, coursework only “had limited influence on the PhD” in Australia, and “until recently there has been little in the way of coursework in the Australian PhD” (Kiley 2014, p. 9). Gube et al. (2017) indicated that in the Australian context, coursework was not necessarily discipline orientated and is mainly involved in the training, focusing on the generic research skills. Some researchers pointed out that coursework brought consideration of the candidates’ life beyond their PhD (Kiley 2014), such as “leading to job-readiness on graduation” (Guerin, Kerr & Green 2015, p. 116).

Some formal educational approaches have arisen to support doctoral students learning, run by both inside and outside academic institutions. These approaches include writing

groups (Aitchison 2014; Murray 2014), reading groups (Grant & Pearson 2007; Li, S 2006), and professional workshops and seminars (Roulston et al. 2016). Although the forms of these groups varies on different dimensions, such as the content, membership, leadership, place and frequency of the meetings, the participants always could provide helpful contribution to the group, and they also receive the benefits from other members (Roulston et al. 2016). For example:

Small group mentoring where students meet with the mentor in monthly synchronous sessions to discuss common guidelines and challenges, share research updates, drafts and research design and where students organize online peer support by sharing literature, reading drafts, and providing each other with feedback (Kumar, S & Johnson 2017, p. 218).

Other types of academic activities including attending conferences, and internships within certain areas, benefit for enlarging PhD students' social networks (Grant & Pearson 2007; Manathunga 2015; Watt 2016). Hum (2015, p. 38) further emphasised that "internships may help support better informed career options". The informal group activities, which offer personal support to students, particularly newly arrived students, include sporting sessions, weekend bushwalks, joint coffee breaks, or accessing other social get-togethers with their peers (Manathunga 2015).

As the research indicates the process of PhD supervision needs to offer a more advanced academic environment rather than only focusing on completing projects. Academic activities, such as attending conferences, participating in different discussion groups, and internships, are effective approaches for improving the PhD skills and outcomes (Halse 2011; Löfström & Pyhältö 2014; Manathunga 2015). However, academic resources do not seem to be in abundance in China. In a research discussion on postgraduate's development and strategy, which involved ten Chinese universities and 3,325 postgraduate students, Li (2006) found the valuable and useful resources, provided by universities, were limited. Just over half of the students (52.1 percent) reported the lack of academic resources in their universities. Compared to 70.7 percent postgraduate students who did not have any chance to participate in conferences, only 7 percent postgraduate students often attended academic conferences. For the resources of free workshops, 86.8 percent of postgraduate students attended the workshops held by some specialists from another universities. Li (2006) also showed that only 33.3 percent postgraduate students obtained internships opportunities from their universities.

Faced with the problems of limited academic resources from Chinese universities, doctoral supervisors need to recognise the functions and importance of different approaches and then use well the existing academic resources and approaches for effectively supervising their PhD students.

3.5 The research questions

Effective doctoral supervision is significant in the process to assist PhD students to succeed in their programs. The positive doctoral supervision can: increase the doctoral students' satisfaction; improve the outcomes of doctoral graduates; promote trusting and positive supervisor-student relationships; be the basic and external guarantee for acquirement of the doctoral degree certification; and benefit the development of individuals, universities, and disciplines. Therefore, effective doctoral supervision has been recognised by academics.

Like other nations, effective doctoral supervision is paid much attention by Chinese academics, Chinese universities and Chinese government. Due to the relatively low number of doctoral supervisors within the Chinese context, some supervisors have to work with more than 30 research students, and some supervisors need to work on the research which they are not good at, especially in the new and popular disciplines.

In China Management is the largest sub-discipline of Social Science (Wang, X & Song 2013). The Management discipline developed quickly, and this discipline became popular in recent years. The enrolment of doctoral students continues to expand in the last twenty years. However, the number of doctoral supervisors in the Management discipline increases only slowly which does not satisfy the requirements of students' demands.

Much literature focuses on effective doctoral supervision in the world; however, few research doctoral supervision within the Chinese context. There are many differences (backgrounds of cultures, economic, education history, government regulations, and government policies) between Western countries and China. These factors all may influence effective doctoral supervision. Therefore, this research focuses on exploring the problem:

How does the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China?

There are three research questions to address for this problem:

- How does the cultural custom and policy practice of China influence the responsibility and strategy of Chinese doctoral supervisors in the Management discipline in China?
- How does the culture and background of China impact on the daily doctoral practice focusing on support for students' projects and individual development in the Management discipline in China?
- How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degree in the Management discipline in China?

With answers to these questions, I will be able to establish a theory relevant to doctoral supervision in the Management discipline in China and this theory will explore how the cultural custom and policy practice of China influence doctoral supervision.

3.6 Conclusion

According to reviewing the literature on doctoral supervision, this chapter has provided a definition of supervision, the purposes of supervision in different stages of doctoral education and the broad models of doctoral supervision. Then the factors which influence doctoral supervision were outlined.

Three main elements impact on doctoral supervision: the factors related to doctoral supervisors; the factors related to doctoral students; and the other factors in academic environments. The section related to the factors of doctoral supervisors introduced the importance of doctoral supervisors, the responsibilities of supervisors, the criteria of effective supervisors, the importance of supervisors' personal characteristics, professional knowledge, supervising experiences and relevant skills. The elements related to doctoral students, which might influence doctoral supervision within the particular background, consist of students' pressures, expectations, prior knowledge, prior skills and student's individual characteristics. The description of academic environments includes

the other members and some academic activities. The other members involved in the process of doctoral supervision are other academic staff, administration staff and peers. The academic activities include coursework, group workshops and seminars, internships and conferences.

However, few research articles focus on how the cultural custom and policy practice of China influence Chinese doctoral supervision. Based on an overview of the literature, the research questions were presented in this Chapter. The next Chapter (Chapter 4) will present the research methodology and research design.

Chapter 4: **Research Methodology and Design**

Chapter 3 reviewed the literature on doctoral supervision. This chapter presents the research methodology and design for exploring and disclosing the research problem. It explores the research problem:

How does the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China?

Three following research questions were formulated to answer this research problem within the Management discipline in China:

- How does the cultural custom and policy practice of China influence the responsibility and strategy of Chinese doctoral supervisors?
- How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on support for students' projects and individual development?
- How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degree?

As Figure 4.1 shows the structure, this chapter commences with research design (Section 4.1). A qualitative research design concentration on the case study is used in this research. The information linked with the judgement and measurement of the quality of case study is listed. The context of this study is presented in Section 4.2. A research site as a single-case is used in this study. The basic context of the Case University and the three interview settings are briefly introduced in this section. In order to reduce the risk for the interviewees, any personal, sensitive or potentially incriminating information, such as the interviewees' names, working contact details, position titles and university name will be kept confidential. Therefore, when I provide the foundation information about this university which I collected data, I used a/the/this Case University to replace the University's name. Furthermore, the addresses of World Wide Web pages involved in the description of the foundation information about this Case University in this chapter has been removed. In Section 4.3 ethical considerations are presented, and in Section 4.4 the

process of data collection is outlined. Finally, the preparation for data analysis (Section 4.5) is explained. The process of data analysis's preparation includes four sections: demographic analysis of doctoral supervisors, demographic analysis of doctoral students, demographic analysis of doctoral graduates, and mapping of interview questions to research questions.

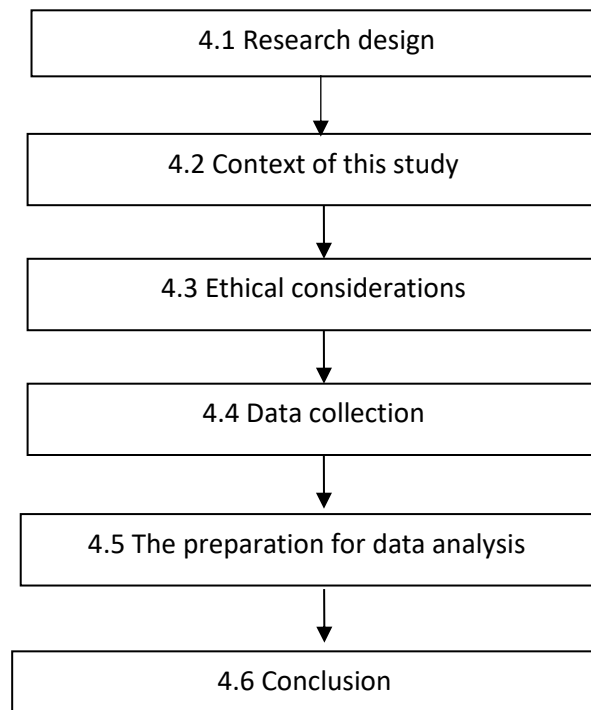


Figure 4.1: Structure of Chapter 4

Source: Developed for this research

4.1 Research design

The target of the design of this research is to effectively address the research problem: how does the cultural custom and policy practice of China influence the doctoral supervision in the Management discipline in China? This research reflects the findings of the impact on doctoral supervision of the cultural custom and policy practice of China, based on the understanding of the individual feelings and experiences from different perspectives in one Chinese university.

4.1.1 Research approach: Justification for the selection of qualitative research

This study needs a methodology which explores the deep understanding of experiences and daily life regarding doctoral supervision in the Management field within the Chinese context. Qualitative research can

explore a wide array of dimensions of the social world, including the texture and weave of everyday life, the understanding, experiences and imaginings of our research participants, the ways that social processes, institutions, discourses or relationships work, and the significance of the meaning that they generate (Mason 2002, p. 1).

Compared with quantitative researchers, four main characteristics are identified to understand the function of qualitative inquiry: “the focus is on process, understanding, and meaning; the researcher is the primary instrument of data collection and analysis; the process is inductive; and the product is richly descriptive” (Merriam 2009, p. 14).

A qualitative research design is used in this research, because of the following four reasons, linked with the four main characteristics of qualitative research. Firstly, “The overall purposes of qualitative research are to achieve an *understanding* of how people make sense out of their lives, delineate the process (rather than the outcome or product) of meaning-making, and describe how people interpret what they experience” (Merriam 2009, p. 14). My research focuses on understanding the process of how the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China. I am interested in understanding how the participants interpret their individual experiences, and describe the different feelings and also understanding the process of doctoral supervision, and their perspective on the influence they have from the cultural custom and policy practice of China. Therefore, my research focuses more on gaining the information on process, understanding and meaning, which satisfies the first function of qualitative research.

The second characteristic of qualitative research is that: “the researcher is the primary instrument for data collection and analysis” (Merriam 2009, p. 14). The benefit of this characteristic is that the researcher “is able to be immediately responsive and adaptive” which is the ideal way to do data collection and data analysis (Merriam 2009, p. 15).

Furthermore, as the data collector and data analyst, the advantage of qualitative research is that the researcher can gain the accurate, abundant information through immediate responses and further checking according to participants' replies. In my research, Chinese doctoral supervision is influenced by many factors, which involves traditional Chinese culture, history, economy, and some social welfare policies. Based on the complex Chinese background, in order to obtain accurate and abundant information, as the primary instrument, I need to expand my understanding through verbal and nonverbal communication with participants and immediately summarize and clarify participants' feeling and experience, which they passed to me. If I gain unusual or unanticipated replies from the interviewees, I need to ask immediately the further questions to find the reasonable explanation. And then based on their reply to ask more information which may involve the culture and historic background to deeply explain and understand the reality of Chinese doctoral supervision.

Thirdly, qualitative researchers often adopt a qualitative study, "because there is a lack of theory or an existing theory fails to adequately explain a phenomenon" (Merriam 2009, p. 15). So the third characteristic of qualitative research is that the researchers more often follow nonlinear and cyclical research paths, and emphasise the importance of induction (Neuman 2006; Taylor, Steven, Bogdan & DeVault 2015). In this research, I found little existing literature on the topic of Chinese doctoral supervision, which means that there is a poor understanding of how the cultural custom and policy practice of China influence doctoral supervision in China. There are some models or theories regarding doctoral supervision in Western countries; however Chinese background has been deeply embedded in daily life in different levels of education in China, and the Western theories seem to fail to explain Chinese doctoral supervision. So this research focused more on building concepts throughout the gathering of the relevant data. Merriam (2009, p. 16) emphasised that the inductive process means that qualitative "researchers gather data to build concepts; hypotheses, or theories rather than deductively testing hypotheses as in positivist research". This research is more focused on discovery and establishing a theory of the cultural custom and policy practice of China influencing doctoral supervision through exploring the experiences, perceptions and feelings from individual doctoral supervisors, current PhD students and successful PhD graduates in the Management discipline in China, rather than on measuring the existing hypotheses for testing a theory.

Therefore, qualitative methodology is often concerned with building this theory in this research.

Fourthly, “the product is richly descriptive” (Merriam 2009, p. 14). Compared to the quantitative inquiry, qualitative inquiry usually provides the rich words and descriptive pictures rather than simply numbers (Merriam 2009). This research emphasised descriptions of the big picture of the Chinese context, and focusing more on explaining how the cultural custom and policy practice of China influence the doctoral supervision within this special context. So all the natural description about the feelings, experiences and activities from each participant would contribute to this research.

In addition, qualitative study also has other characteristics, such as “*emergent and flexible*”, and usually using a “nonrandom, *purposeful* and small” sample (Merriam 2009, p. 16). Kumar (2005) and Ticehurst and Veal (2000) agreed and they indicated that the qualitative methodology generally obtained the knowledge from sensory experiences through a flexible and unstructured approach; and gathered the great and multiple information from a small sample of respondents. In this research, in order to gain the rich descriptive data, I adopt the flexible approach to collect data and all the participants were from small nonrandom and purposeful samples. Therefore, qualitative methodology was adopted for this research.

4.1.2 A qualitative concentration on the case

“Case study is not a methodological choice but a choice of what is to be studied. If case study research is more humane or in some ways transcendent, it is because the researchers are so, not because of the methods” (Stake 2005, p. 443).

A case study is identified by Yin (2009, p. 18) as “an empirical inquiry that

- investigates a contemporary phenomenon in depth and within its real-life context, especially when
- the boundaries between phenomenon and context are not clearly evident.”

The case study is one way for Social Science research. Yin (2009, p. 8) indicates that choosing a strategy needs to consider three conditions: “(a) the type of research question

posed, (b) the extent of control an investigator has over actual behavioural events, and (c) the degree of focus on contemporary as opposed to historical events”.

Compared to the five research strategies: experiment, survey, archival analysis, history and case study, the strategy of the case study is more suitable for this research for the designs following four reasons.

Firstly, the purpose of this research is establishing a theory of cultural custom and policy practice of China influencing Chinese doctoral supervision through finding out the results from the particular details and context within the process of data collection from a small numbers of cases. Several researchers have indicated the advantages, which show that case study design can satisfy the requirement of this research. For instance: Cavaye (1996) points out that case studies are good at finding out the details and reality through investigating a contemporary phenomenon in a natural context, which is extremely useful for establishing and developing concepts and primary theories for the particular phenomenon rather than testing a hypothesis. Gable (1994, p. 113) indicates that case studies, as a strategy, are used in the investigation which collects data “from a small number of organizations through methods such as participant-observation, in-depth interviews and longitudinal studies”. For this study, I collected my data from Case University and the data are from three different groups rather than the organisation. Case study research focuses on finding the results of particular details and contexts and it is usually examined by a single or a few cases, rather than pursuing representative results over a large population (Yin 2009). In addition, case studies are regarded as commonly used in Social Science disciplines, such as Education (Yin & Davis 2006), and Management (Yin 2009). This research is involved into two multi-disciplines between Management and Education. Therefore, the case study design is suitable for this research.

Secondly, based on the types of questions posed in the current research, three strategies, experiment, survey and archival analysis, would be less used in this research than the other two research strategies, that is, history and case study (Yin 2009). As the existing literature shows, the purpose of this research explores how the cultural custom and policy practice influence effective doctoral supervision within the Chinese context. Yin (2009, p. 2) emphasised that “case studies are the preferred method” when the situation is

focusing more on “how” and “why” questions are being posed”. Therefore, case study is used in this research.

Thirdly, a case study approach is chosen in this research, because “the investigator has little control over events” (Yin 2009, p. 2). I, as the researcher, interviewed doctoral supervisors (who finished their doctoral degrees and who had supervision experiences), postdoctoral fellows (who finished their doctoral degrees), and current doctoral students (who were doing their PhDs). Even if I prepared the draft of interview questions, during the whole interview process, I, as the investigator, had little control on how the respondents approached the interviews.

Finally, this research focuses on the ‘contemporary’ within the Chinese context of doctoral education, as opposed to historical events. Postgraduates’ education, especially doctoral education, is regarded as a contemporary attention area in China. The aim of this research is to develop a contemporary theory, and to emphasise results with analytical generalizations rather than testing an existing theory and related hypothesis to obtain the result with statistical generalizations.

To sum up, I consider that this research process is complex, and explores the typical details and particular context through in-depth individual interviews with doctoral supervisors, postdoctoral fellows, and current doctoral students. Therefore, case study is suitable for this study because of four reasons: building a theory rather than testing, answering a why or how question, little control by researcher, and focusing on the ‘contemporary’.

4.1.3 The quality of the case study

In the process of designing the strategy of qualitative research, the researcher needs to consider how the quality of research design is achieved and what criteria need to be adopted for judging and measuring the quality of research design (Flick, Kardorff & Steinke 2004). Schwandt (2007, p. 299) indicated that “Trustworthiness was defined as that quality of an investigation (and its findings) that made it noteworthy to audiences.” The four criteria for judging the trustworthiness of this study are: credibility, transferability, dependability and confirmability.

Credibility

The first criterion is credibility, which is “parallel to internal validity” and “addressed the issue of the inquirer providing assurances of the fit between respondents’ views of their life ways and the inquirer’s reconstruction and representation of same” (Schwandt 2007, p. 299).

Considering credibility, I used a series of ways to achieve this criterion, as the following shows:

- I did the pilot study and passed my preliminary data analysis results to My Senior Professor, who worked in this leading university, and to the relevant interviewees for checking the consistency between the interviewees’ descriptions and my representation.
- I transcribed each interview in Chinese based on the digital recording, and then I passed my transcription to each interviewee to check the accuracy.
- I translated a sample of transcriptions and some of the main quotes from Chinese to English as the examples, and my supervisor checked them for accuracy.
- In order to clarify some particular words, such as *pinde*, which had been translated from Chinese to English, I discussed with my supervisors and other researchers to confirm the accuracy and meaning.
- I participated in three conferences (Zhang, Y 2010, 2014, 2016) in different years and presented my results. Some audiences, who were from China and/or who had experiences working or studying in China, were interested in my research, and they recognised and understood my data, and they also provided me the suggestions how I could better report my results.
- The data in this research were from three different interviewee groups: doctoral supervisors, current doctoral students, and successful doctoral graduates. I found that the majority of results from the three interviewee groups were similar, which is shown in the data analysis Chapters (Chapter 5 and Chapter 6).

Transferability

The second trustworthiness criterion is transferability which is “parallel to external validity” (Schwandt 2007, p. 299). Transferability “dealt with the issue of **generalization** in terms of case-to-case transfer”. As Yin (2009, p. 15) states that “case studies, like

experiments, are generalizable to theoretical propositions and not to populations or universes”. The purpose of my research is establishing a theory of cultural custom and policy practice of China influencing doctoral supervision within the Chinese context. Although I collected all data from only one Case University, this university is a well-developed sample for other leading universities within the Chinese context. Due to some special doctoral education policies and the different distribution of higher education, Chinese leading universities, such as this Case University or the top ranking universities, have the most famous supervisors; the national and ministerial level key projects; abundant funding; and advanced infrastructures. The educational ideas and practical experiences are always recognised by other levels of universities within the Chinese context. The successful practical experiences and educational policies from Chinese leading universities are always followed by other universities in different provinces in China. Furthermore, some Chinese culture, such as the Confucian culture, influences many Asian counties, and this Case University is one of the top fifty universities in the world; therefore, the theory and the results from this study are likely to have the generalization for other Chinese universities, the universities with the similar cultural backgrounds, or the organisations with the similar policies backgrounds.

Dependability

Schwandt (2007, p. 299) identifies “dependability (parallel to reliability) focused on the process of the inquiry and the inquirer’s responsibility for ensuring that the process was logical, traceable, and documented”. In order to more directly satisfy this dependability criterion, the research needs to report detailed process, which can enable a further researcher to easily repeat the work (Shenton 2004). There are two approaches which can reduce the errors and bias in the case study research. One is “the use of a *case study protocol* to deal with the documentation problem in detail”, the other is “the development of a *case study database*” (Yin 2009, p. 45). For enhancing dependability in this research, I developed and refined a research (case study) protocol, which is shown in Figure 4.2, and which was then tested in a pilot study, which is shown in Section 4.4.3. I followed up this protocol throughout the whole data collection phase. In order to develop a consummate case study database, I recorded all interviews by digital audio recorder, kept and stored the transcriptions for reviewing the collected information, which is further shown in Section 4.4.4. In addition, for analysing data, all transcriptions were uploaded

to Nvivo 10.0 software, and the results of data coding and data sorting saved on a password protected computer. All documents of sorting data results were printed out for further checking in the future. Further information on data store is introduced in Section 4.4.4.

Confirmability

The last criterion is confirmability. Schwandt (2007, p. 299) indicated that “*confirmability* (parallel to objectivity) was concerned with establishing the fact that the data and interpretations of an inquiry were not merely figments of the inquirer’s imagination”. This criterion is especially challenging for the researcher who uses case study as their research methodology. Several people are often dissatisfied and doubt the case study investigator whose judgments from the process of data collection are too ‘subjective’. Three tactics can be used in case study research for satisfaction of this criterion. These are: “use multiple sources of evidence”; “establish a chain of evidence”; and to “have key informants review draft case study report” (Yin 2009, p. 41).

This research used all of these three ways. Firstly, during the process of data collection, this research used multiple sources of evidence. When I collected data and analysed data, I set up and maintained a chain of evidence. The purpose of this principle benefited the reader who can “follow the derivation of any evidence from initial research questions to ultimate case study conclusions” (Yin 2009, p. 122). Furthermore, the reader can also trace these steps in either direction, from research problem to research conclusion (case study report) or from research conclusion (case study report) back to research problem, thus maintaining a chain of evidence as following Figure 4.2 shows:

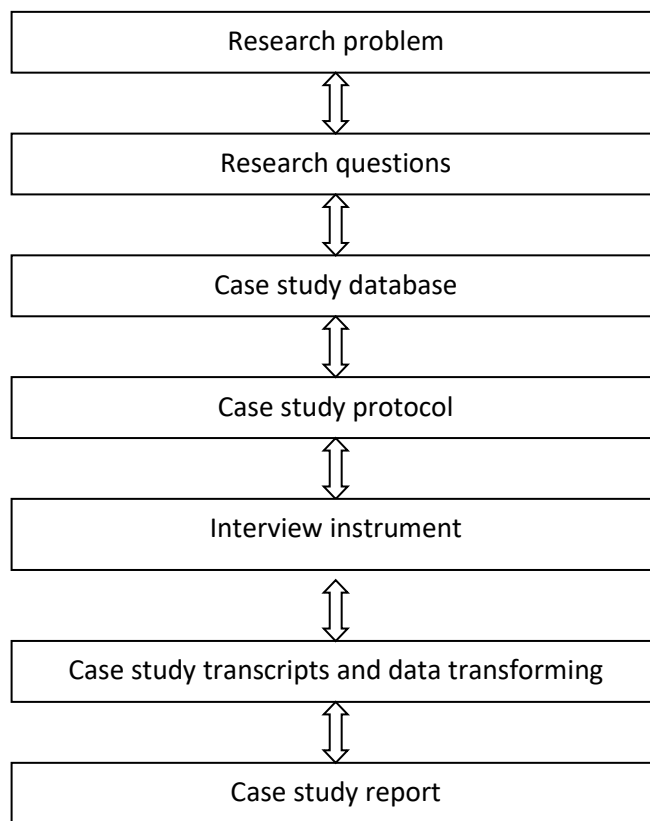


Figure 4.2: Maintaining a chain of evidence

Source: Developed for this research

In addition, the final tactic is that my supervisors reviewed the data analyses chapters. As mentioned in the Section on *Credibility*, one supervisor who is expert in Chinese culture and Chinese background has strong knowledge background and language abilities between English and Chinese. This supervisor reviewed three examples of my transcripts from Chinese to English, and the sample of the quotes translated from Chinese to English. My supervisors reviewed my case report drafts and this review procedure assisted me to reach the confirmability criterion for this research (Yin 2009).

4.2. Context of this study

Walsham (1995) indicates that the benefits of single study include in-depth analysis which offers abundant descriptions and understanding. It is more suitable for studies which are being encountered for the first time or operated in a new way (Yin 2009).

In this research, I chose one research site and the characteristics of the case are as follows:

- This university has the qualification to award doctoral degrees in the Management discipline.
- This university contains several famous doctoral supervisors in the Management discipline.
- This Chinese university has abundant funding.
- This university is an as well-developed example for leading the way for other universities in the Chinese context.
- The Management discipline is recognised as a major and famous discipline in this university.

The Case University (which has replaced the name by a/the/this Case University for confidentiality) I used in this research has all characteristics identified above. Firstly, this Case University had the authority to confer the doctoral degree in the Management discipline. Secondly, the Case University, which belongs to the Project 985 Universities, gained many funds from Chinese government (Zhang, H, Patton & Kenney 2013), and had famous doctoral supervisors, particularly in the Management discipline. Thirdly, the Case University is one of top ten universities in China, which are regarded as well-developed example to lead other Chinese universities in China, so the results from this university may be broadly applied in other Chinese universities.

4.2.1 The brief introduction of the context of a Case University in this research

The Case University is an old national comprehensive university in China. This university began to enrol the postgraduate program as the one of the first universities, and this university was approved to have the authority to confer the doctoral degrees more than 30 years ago (A Case University 2017a). This Case University had almost 250 special programs to confer doctoral degrees, and altogether more than one thousand doctoral supervisors work in this university (A Case University 2017a).

The Case University includes more than 40 schools and departments. Three schools or departments provide doctoral training programs focusing on the Management discipline (A Case University 2017b).

The School of Management was the first school at this Case University to apply the new approaches to select doctoral candidates. The approaches of selection of doctoral candidates were transferred from the exam-oriented selection to review-oriented selection. This school provides the three main academic areas: “Applied Economics”, “Business Administration”, and “Management Science and Engineering” (School of Management 2017).

Department of Information Management was established in the middle of 20th century. In recent years, this department has two specialties programs authorized to confer doctoral degrees: Library Science, and Information Science. There are altogether 28 academic staff in this department (Department of Information Management 2017).

The School of Government based on a combination of three departments: the Department of Political Science, the Department of Public Administration, and the Department of Urban and Environmental Studies (School of Government 2017). There are a total of 52 full-time academic staff in this school including 28 Professors and 24 Associate Professors. Many Professors from this school gained the award of ‘top ten lecturers’ at this university, and most Professors in this school need to work as the senior consultants for the Chinese Central and Local Government (School of Government 2009). That is to say that these Professors have the relevant individual projects funded by Chinese Central and Local government. Until the end of 2009, there were five principle doctoral supervisors focusing on the Management disciplines.

4.2.2 Three interview settings: characteristics of the participants in the case

The procedure of sampling choice is used in the process of data analysis. The researcher makes an estimate and description as the result of a larger set of numbers, and through the data analysis arrives at a smaller set of cases (Zikmund 2003). The samples are divided into two main categories: nonprobability sampling (such as quota sampling, purposive sampling, snowball sampling, and sequential sampling), and probability sampling (including simple random sampling, stratified sampling, and cluster sampling) (Leedy & Ormrod 2005; Neuman 2006).

This research adopts a non-probability approach and purposive sampling. There are three interviewee groups: doctoral supervisors, successful PhD graduates (postdoctoral fellows), and current doctoral students. The strength of interviewing three different groups is that I can obtain three different, but complementary, perspectives on which to use data triangulation to clarify meaning and then accuracy analysis.

The human resource department in this Case University gave me the list of potential participants and then I selected the interviewees based on this list. All interviewees worked in the Management discipline at this leading Chinese University. The characteristics of interviewees were considered as the following show.

1. The doctoral supervisors covered the groups within the different disciplines underlying Management, as well as gender, position, working status, length of work experience at this leading Chinese university, overseas experience, and the period since completion of PhD. The characteristics of the interviewees from the doctoral supervisors' group are that the supervisors:
 - have a reasonable period of supervisory experience in their discipline
 - have a number of successful doctoral graduates
 - have few failures recorded in supervising their doctoral candidates
 - are regarded as positive supervisors, through evaluation by the university and their doctoral candidates.
2. The current PhD student interviewees covered different groups such as different sub-disciplines underlying Management, gender, enrolment types, scholarships, work experience before PhD, years of doctoral program, and participants educational background. The characteristics of the interviewees from the group of current doctoral students: they
 - have good performance in PhD program
 - have not failed examinations in the first year.
3. The successful PhD graduate interviewees covered the groups from within the different sub-disciplines in Management, as well as gender, enrolment types, scholarships, work experience prior to PhD, overseas experience, and time taken to

complete PhD. The characteristics of the interviewees from the group of the successful doctoral graduates: they

- have good performance in PhD program
- have good publication record.

4.3 Ethical considerations

Research ethics is a major issue for researchers in social research. The shortcomings of unethical behaviour can lead to research fraud and scientific misconduct which results from a researcher falsifying the results or misrepresenting the data or method on the research procedure. Unethical behaviour may also cause “physical harm, psychological abuse, legal jeopardy”, and a career barrier to the participants (Neuman 2006, p. 132). When ethical considerations have been taken that begin and end with the researcher, many disadvantages, such as physical harm, can be avoided (Zikmund 2003). In this research, ethical considerations include the following.

Firstly, the interviewees were given an ‘interview information letter’ and an ‘informed consent form’ before they participated this research. This letter and informed consent indicated that respondents had privacy rights and they decided by themselves whether they revealed their information or not in this research. Participations were also told about the confidentiality of this research before the interviews commenced.

Secondly, all participations were voluntary. If the interviewees felt uncomfortable, they could stop the interviews and withdraw from this research at any time. The interview information letter also showed that there were no financial recompense and no prompting offered to the participants in this research.

Thirdly, this research did not involve pseudo investigations. The purpose of this research is to explore the cultural custom and policy practice of China influencing doctoral supervision within the Chinese context. Participants had been informed that the results of this research were only to be used in this research or academics publication, and there is no other purpose. All interview transcriptions could only be accessed by the researcher, and supervisors if necessary.

Finally, this research project had been examined and approved by the Australian National University, and an ethics application had been permitted by the Human Research Ethics Committee (Human Ethics Protocol 2010/064). In addition, the interview information letter indicated that if the participants had any questions about ethics, they could directly complain to The Secretary of the Human Ethics Research Committee at ANU. Therefore, the enhanced quality of data collection and carefully considered ethical issues will improve this research's quality.

4.4 Data collection

In the process of data collection design, Taylor, Bogdan and DeVault (2015) indicated that the basic procedure of pre-fieldwork following the composition including: selecting settings, obtaining institutional review board approval, writing proposals, access to organisations, access to private setting, telling the relevant content to gatekeepers and informants, and collecting data about obtaining access.

4.4.1 The procedure of data collection

An overview

In the qualitative research, the research cannot be sure what existing literature might be directly relevant to the study, and most useful literature might be from the research on other types of organisations (Taylor, Steven, Bogdan & DeVault 2015). In order to provide the good quality overview of this research, I spent more than one year reviewing relevant literature and preparing the research proposal. The background information was composed by research objectives, research issues, and the demonstration of the relevant reading about this project to the relevant organisation. The purpose of this research is to establish a theory of the cultural custom and policy practice of China impact on doctoral supervision in Management in China, which is illuminated in Chapter 1 (introduction). The research problem, research issues and the relevant reading about this topic have been provided in Chapter 2 (Chinese background and context) and Chapter 3 (Supervision).

The main tasks of field procedures are necessary in data collection. The more well planned the designs and operations in field procedures are, the better benefits in the

process of data collection. Taylor, Bogdan and DeVault (2015) show that in the data collection process, the field procedures need to focus on four main tasks:

- Obtaining access to key interviewees or key organisations;
- Gaining access to public and quasi-public setting or private setting: having sufficient resources such as a personal computer or laptop, and quiet place to write notes privately;
- Preparing the information on my research procedures and interesting need to tell the informants;
- Collecting data about obtaining access: making a feasible and clear schedule for the activities of data collection.

Before I started to collect data by interviews, an information letter (Appendix 1) had been sent to the organisation (the Case University). After I obtained permission (Appendix 2) from this organisation, the Interview information letter (Appendix 3) and the interview consent form (Appendix 4) then were sent to each interviewee. I selected following the potential interviewee list provided by the relevant department in the Case University. The further details about the interviewees' selection will be introduced in Section 4.4.2. The interview information letter and the interview consent form provided essential introduction about this research topic, the research objective, purpose, and research problem, in order to allow the participants to fully understand this project. Although Chinese is the official language in China, I considered that most staff in higher-level positions at this university, and all doctoral candidates, doctoral graduates and doctoral supervisors in China have good skills in English, particularly in reading and writing. Therefore, all information letters and the interview consent forms had been sent to this organisation or interviewees in English versions. No participants or staff involved in this research had a problem with reading the English version documents on the information letters and the interview consent forms during the data collection process.

Field procedures

In China, there is no Ethic Committee in organisations or institutions for doing research projects. Instead of the process of gaining the permission from the Ethics Committee, in this research, in order to successful collect data, and obtain the permission to interview from the selected university, a contact letter in English had been sent to the Deputy Vice

Chancellor, who was in charge of the research project at this leading Chinese University. The contact letter described the background of the researcher, and introduction of this project. The assurance of confidentiality was important to gain trust and further cooperation. Furthermore, through the support from the previous supervisor, My Senior Professor who worked for many years in the Management discipline at this university, I have achieved access in cooperation with the staff who worked in Human Resource Department, postgraduate office and student administration at this leading Chinese university. In order to improve and ensure the confidentiality, I sent both the consent letter and introduction letter in English to relevant initial candidates who had been selected by me following the suggestion suggested by the staff from the Human Resource Department and Student Administration, based on the selection criteria. With My Senior Professor's support, I gained an independent office at campus as the basic location for collecting data and a locker for temporary storage of data.

4.4.2 Interviewing

The research data was mainly collected from interviews as the following shows.

The interview is regarded as the favourite tool to find the information for the social researcher (Brinkmann & Kvale 2014; Taylor, Steven, Bogdan & DeVault 2015). The interview is a purposeful conversation between two or more people and the purpose of the interview is to obtain the individual's feelings and perceptions (Neuman 2006). There are three options within interview types: face-to-face interviews, telephone interviews and group interviews (Creswell 2003).

Face-to-face interviews were adopted in this research for the following reasons. Firstly, due to the time and cost limitation, I, as a researcher, did not observe the whole PhD supervision process which would take a long time (at least four years for full time students or eight years for part time students). However, in order to overcome this limitation, I selected the students' participants who were from the different years of their PhD. One of the advantages of the face-to-face interview (one-to-one individual interview) is useful in the situation when the researcher could not directly observe the participants (Creswell 2003). Secondly, the one-to-one in-depth interview is convenient for the participant to provide historical information, and the rich and deep information for development of a

robust theory (Carson et al. 2001). The aim of this research is to develop a theory of how the cultural custom and policy practice of China influence effective doctoral supervision in the Management discipline in China. In order to establish a robust theory, face-to-face interviews are suitable for this research. Finally, face-to-face interviews provide the opportunity for the researcher to encourage the participants to complete the interviews, and correct any misunderstanding by observing the participants' non-verbal behaviour (Creswell 2003; Yin 2009). Therefore, using face-to-face interviews in this research can help me to gain accurate information and clear any misunderstandings to further clarify the relevant information.

Semi-structured interviews were used in this research to guide the interview schedule. A semi-structured interview can offer a rich source of data in a short interview time, which can make the interview procedure more cost-effective (Bryman & Bell 2007). The flexibility of semi-structured interviews allows the researcher to add or adjust questions where necessary (Saratakos 1998). In this research, in order to guide the interviews well, semi-structured questions were planned, although the interview questions subtly varied from interview to interview. It means that the researcher may omit some questions, which are not relevant, to particular special interviewees. On the other hand, extra questions may be added to provide detailed explanation from some participants.

Interviewees for this research worked or studied at the Case University. As Figure 4.3 shows, the potential participants for individual interviews were chosen, based on the characteristics of interviewees' choice, mentioned in Section 4.2, and suggestions from the Human Resource Department, Postdoctoral Office and Student Administration at this university. Then the primary selection pool of potential interviewees was set up. At the same time, My Senior Professor introduced me, or talked about my research, to some potential interviewees. Furthermore, I connected with each interviewee to ensure the appropriate time and place for doing the formal investigations. I also provided my available time schedule in case the interviewees' time changed.

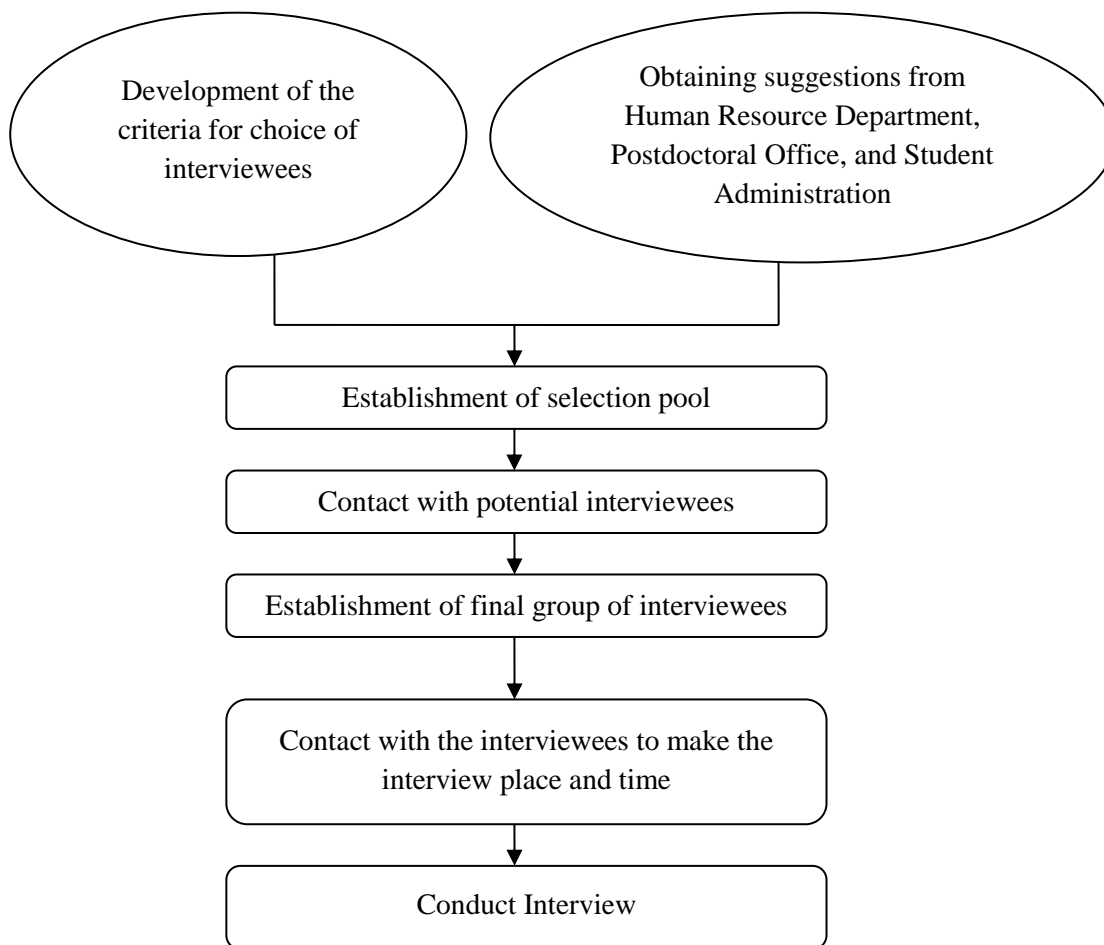


Figure 4.3: The process of interviewees' selection

Source: developed for this research

As mentioned in Section 4.4.1, an interview information letter and a consent form in English were sent to potential participants prior to the interview, offering primary information about this research.

Interview instrument

The interview instrument was formatted to refine the framework from the existing literature, and then adjusted based on the pilot case study. All research questions and interview questions were designed first in English, and then, because the native language for all interviewees was Chinese, I then translated the main interview questions to Chinese. In order to ensure the accuracy of the translation of the main research questions, My Senior Professor reviewed the interview questions in Chinese. Furthermore, My Senior Professor helped me to prepare and practice the interviews in Chinese. When I first met

with each interviewee, I inquired which language she/he preferred to use. Although all interviewees had good skills in English, because the first language of interviews was Chinese, they preferred to speak in Chinese to reflect accurately their feelings and understanding.

All of the interviewees were asked similar questions. I did my initial order of the interview questions to avoid losing any important ones; however, due to adopting the semi-structured approach, sometimes when I interviewed, the question order was changed. The duration of the interviews ranged around from 45 minutes to 90 minutes for each. Digital recorders were used to record all interviews in Chinese, after I had gained permission from interviewees.

4.4.3 Pilot Study

A pilot study is important to ensure the effectiveness of research design and data collection. The pilot study can be used to disclose disadvantages, reveal the inadequacies, and show problems for the research (Saratakos 1998). Yin (2009, p. 92) emphasises that a pilot study can assist the researcher to distil the data collection plans for perfecting the data contents and data collection procedure in the formal investigation process and for developing “relevant lines of questions”.

The main selection standard of the pilot study is “convenience, access, and geographic proximity” (Yin 2009, p. 93). In the pilot study, four individual interviewees, who are working and studying in the Management discipline in a Case University, participated in this process. The four interviewees included two current doctoral students, one successful doctoral graduate, and one doctoral supervisor. All interviewees voluntarily attended these interviews, and had read the information sheet and a list of interview questions. Each separate interview lasted from 45 minutes to 90 minutes. No one withdrew during the interview process. In this research project, the participants chosen in the pilot study were not going to be invited to join in the further stage interviews.

The pilot study further confirmed the interview process would take around one hour. Some minor changes were needed to amend the formal main investigation. Some questions seemed to be repeated. For example: when I ask the two similar questions, I tried to link the interviewee’s answer according the first question, and then let

interviewees think or compare their answers with next question. In addition, these interviewees also gave me some suggestions about the revision of the expression of the interviews questions in Chinese. The pilot study further confirmed that there was no problem with the order of the questions.

4.4.4 Recording and transcribing the interview and data store

I kept the informed consent letter in an English version with each interviewee's signature. A digital audio recorder, with permission from the interviewees, recorded all interviews. The participants could ask to turn off the digital recorder at any time. Then all recorders of interviews in Chinese version by digital audio recorder were saved into the USB flashes as a backup document.

I personally transcribed all interviews in Chinese. Because some interviewees requested that I email them the interview transcription record to confirm its accuracy, I emailed the transcription in Chinese version to each interviewee. All collection documents, including the transcription hard copies, and signed informed consent letters in this study were stored by hard copy, locked in a cabinet on campus. The interview recorders files were also saved and stored in personal computer within encryption files. The USB flashes for saving the backup documents from digital audio recorder also were locked in an office cabinet.

4.5 The preparation for data analysis

Although some information involving the preparation for data analysis was introduced in Section 4.1.3, this section gives the further detailed and coherent process on the preparation process for data analysis.

I, as the researcher in this project, decided to translate the collected data from Chinese to English by myself, when it was necessary for data analysis. I am a native speaker in Chinese. After I obtained a Bachelor degree from the Chinese University and worked several years in China, I moved to Australia for advanced study in 2004. I have lived in Australia for quite a few years and I had work experience being a research assistant, which involved translating the transcription from Chinese to English before I began this research. As mentioned in Section 4.1.3, in order to confirm the accuracy of translation, I translated

three interviews' transcription from Chinese to English as the example and then passed these documents to my supervisor for checking the meaning equivalents.

I used the Chinese version transcription to start to analyse data. I uploaded all 39 interview transcriptions in Chinese to Nvivo 10.0 software to prepare the further data analysis. Furthermore, I read the text of each transcription and coded manually the texts by the tool of Nvivo 10 based on three different groups. I created the new nodes based on the different context of transcriptions. I put similar materials in the same node. Then I dragged and dropped related materials to the higher hierarchy themes, which had been created throughout, reorganising existing nodes based on my cumulative knowledge from related literatures. After I linked with the research questions, I translated the necessary contents, which I used to analyse in this research, from Chinese to English. For ensuring the translation accuracy, I passed some translation information as the example to one of my supervisors, who had excellent translation skills between Chinese and English, for checking.

Although the interviewees were divided into three different groups, I found the majority of the results involving the individual opinions from the three groups interviewees were similar (Please see Chapter 5 and Chapter 6). The similar results from three different groups might be because:

- all participants who provided the reflections had good records on their performance ;
- all participants had good *pinde*;
- all participants could be from same university and same discipline; and
- they might consider that the researcher had been introduced by a professor who was from the same university to collect data.

Therefore, I directly displayed the same results and the integrated data from three groups' interviewees together. However, if I found the different analysis results based on different interviewees' groups, the data would have been shown separately for the comparison, as the following demographic analysis shows. All 39 interviewees, chosen by the researcher, participated voluntarily in this research. All participating supervisors came from three different Management schools. As Tables 4.1, 4.2, 4.3 show, in order to satisfy the requirements of confidentiality and privacy, all real

interviewees' names are substituted by alpha-numeric codes. All supervisors are designated as 1 with 1A (meaning a supervisor called A); all doctoral candidates are designated as 2 with 2A (meaning a candidate called A); and all graduates are designated as 3 with 3A (meaning a graduate called A).

4.5.1 Demographic analysis of doctoral supervisors

Eleven doctoral supervisors participated in this research. The interviewees were considered from different elements, focusing on the responders' gender, position, working status, duration of work experience at this university, overseas experience, and duration since completion of supervisors' PhD.

As Table 4.1 shows the majority of respondents (9) who took part in the interviews were male, and two interviewees (Respondents *IF* and *IJ*) were female. Most interviewees (9) were Professors and only two respondents (*II* and *IJ*) were Associate Professors. All respondents were active, except *IE* who was retired. Nine respondents, who participated in this research, worked more than ten years at this Chinese University, and two responders (*ID* and *IJ*) worked in this university less than ten years. More than half of the respondents (7) had overseas study (*IB* and *II*) or work experiences, and four respondents (*IA*, *IC*, *IE*, and *IH*) had no overseas experiences. Most interviewees had gained their PhD more than 15 years before and only one responder (*IE*), who had strong experiences to supervise students and worked more than 40 years as a lecturer at this university, had no doctoral degree.

In this research, all interviewees were asked to provide their comments according to their individual experiences in four main areas: the brief previous working and education experiences, the individual experiences of supervising doctoral students, the individual experiences when they were PhD students; and gaining experiences and outcomes as doctoral supervisors.

Table 4.1: Profiles of interviewees of doctoral supervisors²²

Doctoral supervisors interviewees	Gender		Position		Working Status		Duration of work experiences at the Case University		Overseas experience		Duration of completion of PhD	
	M	F	AP	P	Active	Retiree	>10 years	<10 years	Yes	No	>15 years	<15 years
1A	√			√	√		√			√	√	
1B	√			√	√		√		PhD		√	
1C	√			√	√		√			√	√	
1D	√			√	√			√	√		√	
1E	√			√		√	√			√	No Doctoral Degree	
1F		√		√	√		√		√			√
1G	√			√	√		√		√		√	
1H	√			√	√		√			√	√	
1I	√		√		√		√		PhD		√	
1J		√	√		√			√	√			√
1K	√			√	√		√		√		√	

Source: Developed for this research

4.5.2 Demographic analysis of doctoral students' interviews

Sixteen doctoral students participated in this research. I selected the interviewees considering different elements: gender, enrolment type, types of funding support, work experience prior to PhD, experiences of participating in exchange programs, and length of time to do their PhD.

As Table 4.2 shows, four interviewees were from each of the different years of the doctoral program. Eleven interviewees were male, and five were female. The majority of the interviewees (10) were self-funded, two got funding from their employers, and four interviewees had government scholarships. Four participants studied part-time, and twelve full-time at this Chinese university, while they did their PhD. Half of the interviewees (8) had work experience prior to their PhD. Almost three-fourth of the participants (12) had no opportunity to participate in exchange programs.

All students focused in reflecting on their individual experiences in three areas: their prior working experiences, education experiences and the purpose of doing their PhD; the individual experiences of their PhD process; and the gains from their PhD journey so far.

²² Abbreviations: M=Male, F=Female, AP=Associate Professor, P= Professor.

Table 4.2: Profiles of interviewees of PhD students²³

Doctoral students	Gender		Enrolment type		Scholarships			Work experience prior to PhD		Participating in exchange program		Years of doctoral program			
	M	F	FT	PT	SPP	CP	SFP	NE	E	OP	NOP	1	2	3	4
2A		√	√			√			√		√				√
2B	√		√			√			√		√		√		
2C	√		√				√		√		√	√			
2D	√		√				√	√			√	√			
2E		√	√				√	√		√			√		
2F	√			√	√				√		√		√		
2G	√		√				√	√			√		√		
2H	√		√		√			√		√				√	
2I	√			√			√		√		√			√	
2J	√			√			√		√		√			√	
2K		√		√			√		√		√			√	
2L		√	√		√			√		√					√
2M	√		√				√	√		√					√
2N		√	√				√	√			√				√
2O	√		√		√				√		√	√			
2P	√		√				√	√			√	√			

Source: Developed for this research

4.5.3 Demographic analysis of doctoral graduates' interviews

Twelve doctoral graduates participated in this research. An effort was also made to cover different elements including gender, enrolment type, type of funding support, work experience before PhD, overseas experience, and length of time to complete the PhD.

As Table 4.3 shows, seven interviewees were female, and five interviewees were male. The majority of the interviewees (7) were self-funded. Five participants had studied part-time, and seven full-time at this Chinese university, while they did their PhD. Almost all of the participants (10) had work experience before beginning their PhDs, and most of the participants (8) went straight on to obtain a postdoctoral position after they completed their PhD. Only one interviewee had overseas study experience, because there are

²³ Abbreviations: M=Male, F=Female, FT=Full-time, PT=Part-time, SPP=State-planned programs, CP=Contractual programs, SFP=Self-funding programs, NE=Straight to study PhD, E=Work experience before PhD, OP= Participation of overseas program, NOP= Without participation of overseas program.

limitations²⁴ on the number of overseas experiences for postdoctoral academics in China and also in this university.

In the interviews, all graduates were asked to reflect in their comments on individual experiences in three areas. They all speak of three things: their prior working and education experiences, the individual experience of their PhD process, and the learning outcomes from their PhD journey.

Table 4.3: Profiles of interviewees of PhD graduates²⁵

Successful Graduates	Gender		Enrolment types		Scholarships		Work experience prior to PhD		Overseas experience		Time since to complete PhD	
Interviewees	M	F	FT	PT	SPP	SFP	NE	E	Yes	No	0 years	1-5 years
3A	√			√		√		√		√		√
3B		√	√		√			√		√		√
3C		√		√	√			√		√	√	
3D		√	√			√		√		√	√	
3E		√		√		√		√		√		√
3F		√	√		√			√	√		√	
3G	√			√		√	√			√	√	
3H	√			√		√		√		√	√	
3I		√	√		√		√			√	√	
3J	√		√		√			√		√		√
3K		√	√			√		√		√	√	
3L	√		√			√		√		√	√	

Source: Developed for this research

4.5.4 Mapping of interview questions to research questions

In order to help my further data analysis, I developed this useful table (See Table 4.4) for successful links between research questions and interview questions. Five sub-questions were created, that are consistent with the three main research questions. There were three versions of interview questions; one for each group of interviewees: doctoral supervisors, current PhD students, and successful doctoral graduates (See Appendix 5). Table 4.4

²⁴ There are study exchange programs, which provide the opportunity for outstanding students to have overseas study experiences during their PhD candidature, but the quota of people is small. In addition, not many people have overseas work study experiences before they started their PhDs.

²⁵ Abbreviations showed same as Table 4.2.

outlines the relationship research questions (RQs), research sub-questions, and interview questions.

Table 4.4: The relationship among research questions, research sub-questions, and interview questions

Research questions	Research sub-questions	Interview questions
How does the cultural custom and policy practice of China influence the responsibility of Chinese doctoral supervisors?	1 How does the cultural custom and policy practice of China influence the responsibility and strategy of doctoral supervisors?	Part A Section2: Q4 Section3: Q1 Section4: Q5 Part B Section2: Q4 Part C Section3: Q5
	2 How does the cultural custom and policy practice of China impact on the doctoral supervisors' strategy to train their candidates?	Part A Section2: Q4 Section3: Q1; Q3; Q4; Q5; Q6 Section4: Q3, Q4, Q5 Part B Section2: Q4 Part C Section3: Q5
How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on supports students' projects and individual development	3 How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on supports of students' projects?	Part A Section2: Q2; Q3; Q4 Section3: Q2 Section4: Q4 Part B Section2: Q2; Q3 Section3: Q2; Q3 Part C Section3: Q3; Q4
	4 How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on candidates' individual development?	Part A Section2: Q2; Q3; Q4 Section3: Q2 Part B Section2: Q2 Section3: Q2; Q3 Part C Section3: Q3; Q4
How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degrees?	5 How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degrees?	Part A Section2: Q1; Q5 Section4: Q1; Q2 Part B Section2: Q1; Q2 Section3: Q1; Q2; Q3 Part C Section2: Q1; Q2; Q3 Section3: Q1; Q2

Source: Developed for this research

4.6 Conclusion

This chapter outlined that I chose a qualitative research methodology to address the research problem:

How does the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China?

A single-case study design was adopted in this research for establishing a theory of how the cultural custom and policy practice of China influence doctoral supervision particularly in the Management discipline within the Chinese context.

After introducing the ethical considerations, this chapter showed the procedure of data collection. One-to-one, face to face, semi-structured interviews were used to collect data from three different groups: doctoral candidates, doctoral graduates, and doctoral supervisors from this Case University. The process of finding potential interviewees and the final identification of interviewee's process were detailed in this section. In order to ensure the effectiveness of research design and data collection, a pilot study was used in this research for confirming the further interview process and the process of data analysis. Finally, the preparation process of data analysis, involving demographic analysis results and mapping of interview questions to research questions was shown. The results of data analysis will be reported in the next two chapters.

Chapter 5: **Data Analysis 1**

The previous chapter provided the overview of the research methodology and research design used in this project. The purpose of this chapter is to show the results: how the cultural custom and policy practice of China impact on the daily doctoral practice focusing on supporting students' projects and individual development in the Management discipline. This is done through discussion of the data analysis results from the three groups' perspectives: doctoral students, doctoral graduates, and doctoral supervisors.

As discussed in Chapter 4, the results are determined from data which derived from face to face individual interviews of 39 interviewees, including 16 doctoral students, 12 doctoral graduates, and 11 doctoral supervisors, who were studying or working in the Management fields, and who had doctoral supervision experiences at this case university.

As mentioned in Chapter 4, in order to satisfy the requirements of privacy and confidentiality, all real interviewees' names were replaced by alpha-numeric codes. All supervisors as designated as 1 with 1A (meaning a supervisor called A); all doctoral candidates as designated as 2 with 2B (meaning a candidate called B), and all graduates as designated as 3 with 3C (meaning a graduate called C), as the Tables 4.1, 4.2 and 4.3 showed.

Data analysis chapters are divided into two chapters, Chapter 5 and Chapter 6. The findings are presented according to the frequency of comments under four categories: daily doctoral practices, the factors related to doctoral supervisors (including supervisors' factors and the relationship between supervisors and students), the factors related to doctoral students, and other factors in the academic environment. As Figure 5.1 shows, Chapter 5 introduces how the cultural custom and policy practice of China impact on the daily doctoral practices (activities). The daily doctoral practice include two main parts: Group education (Section 5.1) and *pinde* education (Section 5.2).

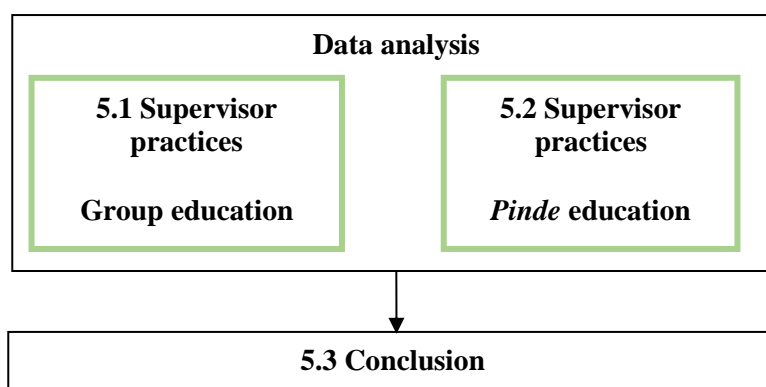


Figure 5.1: Structure of Chapter 5

Source: Developed for this research

5.1 Supervisorial practices (Group education)

All respondents, that is, supervisors, candidates and graduates commented that six types of supervisor practices are involved in the doctoral supervisory process. In terms of the frequency of comments from interviewees in descending order, as Table 5.1 shows, the six types of supervisorial activities are: meetings, participating in supervisors' projects, attending coursework, joining group activities, participating in internship, and attending conferences.

Table 5.1: Coded related to supervisor practices

Theme	Coded	Frequency of comments	Numbers of respondents
Supervisorial practices	Meetings	300	39
	Participating in supervisor's projects	69	29
	Coursework	49	23
	Group activities	42	20
	Internships	32	20
	Attending conferences	25	18
	TOTAL	517	39

Source: Developed for this research

5.1.1 Meetings

According to all 39 interviewees' feedback, meetings are effective and necessary. Meetings adapt to the whole supervisory process, to improve students' professional knowledge and ability, to help the supervisors manage students' progress, and to control

doctoral theses' quality. This section focuses on showing the data related to three types of meetings, and introducing the meetings' contents depending on four stages of PhD.

Meeting styles

Communications between supervisors and students mainly occur in this research through three types of meetings: group meetings, individual regular meetings, and irregular meetings after students make appointments with their supervisors in advance. Appendix 6-1 shows the meeting styles which are used in supervisory process and their ideal meeting styles.

Each form of meeting style was reported to have particular functions and benefits. Firstly, the data indicated that group meetings are run regularly by supervisors and the meetings are usually divided into big group meetings and small group meetings, as Table 5.2 shows. Group meetings have been used popularly to: solve general research problems (*1A*, *2I*, *2M* and *3H*), allocate supervisors' project task and monitor projects' process (*1A*, *2I*, *2L*, and *2P*), pass general information (*1A*, *2I* and *3H*), and monitor students' theses' process (*1G*, *2I*, *2L*, *3H* and *3K*) (The typical comments on four functions of group meeting are shown in Appendix 7-1).

Table 5.2: The styles of group meeting

Group meeting styles	Participants	Respondents
Big group meeting	all master students and doctoral students together	2I, 2L, 2M, 3D, 3H
Small group meeting	students who started their PhD at the same time students who selected similar research topics	2F, 3D, 3H 2L, 3I, 3K

Source: Developed for this research

The advantages of group meetings have been recognised by supervisors in four aspects (See Appendix 7-1): improving students' knowledge and ability, benefiting students who feel fair treatment by leaning about peers' doctoral processes, motivating students to work hard, and saving supervisors' time and energy (See Appendix 7-2 which shows the typical comments on advantages of meeting styles in detail). Some respondents indicated that a group meeting can be regarded as a kind of ideal meeting style which is suitable for current PhD candidates, especially in the Chinese context. In *Responder 3I's* mind, she

felt that “it is not possible to have regular one-to-one face-to-face meetings with each student in the current Chinese context, at least for my supervisor, because he is very busy”.

However, from the supervisor’s perspective, group meetings are not suitable for supervisors who have few students, or for solving students’ individual problems in detail or private problems as the following two quotations show. “I did not use group meetings because of two reasons, one reason is that I only have a few students, and the other reason is that it is not necessary to disturb students without important issues” (*IJ*). “Some students feel nervous to discuss individual issues in a group meeting, so I will communicate with them individually” (*IG*). Compared with supervisors, the responses from students and graduates emphasised that three precautions need to be recognised, when supervisors use group meetings:

- The number of group members needs to be moderate;
- The interval between each meeting should not be too long; and
- Supervisors need to recognise the importance of environments and atmosphere of group meetings.

There are several comments to support the above points of view. Firstly, students suggested that “too many students in the same group would reduce the meeting functionality, because students would feel tired if they had to sit through the whole meeting, and the time is too little for each individual student” (*2I*). Secondly, “I only have two group meetings per semester, which is not enough for me” (*2F*). “Group meeting should be run fortnightly for assessing learning students’ progress and motivating students to work hard” (*2L*). Finally, “If group meetings can be arranged within a relaxed atmosphere and students sit around a roundtable, the effect will be better” (*2I*).

Secondly, compared to group meetings, individual regular meetings are better to provide more guidance in detail, and benefit doctoral candidates to solve their individual problems. The individual regular meetings also benefit to control students’ PhD process, save studying time, and motivate students to work hard. The typical comments on the advantages of individual regular meetings show in Appendix 7-2.

However, the individual regular meeting style is not suitable for either supervisors who are too busy or have many doctoral students, or the students who prefer to monitor their project schedule by themselves. For example, within the supervisor perspective, “Individual regular meetings bring pressures for both students and me. I need to spend lots of time, if I really meet with each student regularly. Students may feel uncomfortable and they do not understand why I do it” (1A). For the students who like to arrange research schedule by themselves: “if my supervisor gave me a deadline about this task, addressed my performance through individual regular meetings, I would feel great pressure and could not work well” (2B). Furthermore, this meeting style is hard to carry out for part-time students, due to the time and energy limitation for both supervisors and students. In addition, some respondents indicated that, when supervisors use individual regular meetings to guide their students, the frequency of regular meetings needs to be considered reasonable, as student 2D emphasised that. “Too high frequency of regular meetings would not be good for both supervisors and students, because it would waste their time and increase students’ study pressure” (2D).

Finally, a third style, irregular meeting after making an appointment in advance is popular in the doctoral training process, because it is the most effective meeting style to solve students’ problems in detail, which was reported by the majority of respondents. For example, “this meeting style saves time for both students and supervisors. After I read a student’s document which s/he sent me, I had a meeting to solve problems directly with them. The efficiency is very high” (1E).

When using this meeting style, who organizes the irregular meeting needs to be determined in advance. The majority of supervisors responded that they contact students actively, if students do not achieve the general doctoral milestone, which is shown in ‘the planning of PhD training’. It is similar to most students and graduates’ respondents’ opinions. They preferred that their supervisors would contact them, when their processes were slow, because it would help them to solve problems and motivate them to study hard. However, some respondents pointed out that their supervisors would not contact them. For example, *Responder 2L* complained that “I did not have contact with my supervisor in the whole year. He did not know what I did this year. If I did not take the initiative to make appointments with my supervisor, I might not have any chance to graduate”.

To sum up, comparing to the three meeting styles, group meetings focus more on macro-guidance for students' projects, supervisors' projects monitoring, and sharing general information for students. Within the Chinese context, the popular and famous supervisors need to supervise huge numbers of postgraduate candidates at the same time. Due to limited energy and time for each supervisor, and because of the important two duties which are influenced by the traditional Chinese culture and current policies in China, Chinese supervisors need to achieve the targets on both candidates' projects-orientation training and person-orientation training. Based on this situation, Chinese doctoral supervisors prefer to use often the group meeting for training their candidates. Regular meetings and irregular meetings after making an appointment in advance focus more on thesis guidance or individual problem-solving. Compared to regular meetings, irregular meetings, which are organized by students, are good to solve students' current problems in detail. The data from this thesis shows that most candidates believed that irregular meetings are an effective approach to solve their individual problems both focusing on their projects and in their personal life.

The meeting contents

The meeting contents vary depending on four different stages in the students' progress. According to the time period of a PhD journey from start to end (See Table 5.3 and Appendix 7-3), the four stages include:

- first meeting which focuses on discussion and formulation of the planning of PhD training ;
- the early stage of PhD, which focuses on topic selection;
- the middle stage of PhD, which focuses on data collection and data analysis; and
- the end stage of PhD, which focuses on the whole theses.

The respondents also suggested that the meeting contents changed a little depending on students' individual backgrounds. For example, when students select their research topics, for students who had no similar background related to their topics, supervisors would provide them with the basic reference list to make the students' start easier; however, for students who had a similar background, most supervisors only suggested their students review relevant literature themselves, instead of passing the reference list.

Table 5.3: The meeting contents in the four different stages

Stages	Meeting contents
First meeting	The planning of PhD training: <ul style="list-style-type: none"> ● clarify the responsibility and functions of both supervisors and students ● determine an orientation of thesis with each student ● discuss students' career development ● ensure the authors' order when published together ● show the general schedule of students' milestones <ul style="list-style-type: none"> ◆ assisting students to select relevant courses in first year of study, ◆ formatting rough schedule of students' milestones including 'Mid-term Examination', 'Thesis Proposal Seminar', 'Pre-submission Oral Review' and 'Thesis Submission'.
The early stage of PhD	Topic selection <ul style="list-style-type: none"> ● Topic selection according to individual interests Advantages: <ul style="list-style-type: none"> ◆ Reducing conflicts of topic selection between supervisors and students; ◆ Increasing students' enthusiasm; ◆ Improving students' academic ability. ● Supervisors gave topics to students (Providing a research direction or giving a research topic) Advantages: <ul style="list-style-type: none"> ◆ Saving students' study time for topic selection.
	<ul style="list-style-type: none"> ● Supervisors also need to consider two more things in this stage: <ul style="list-style-type: none"> ◆ linking with students' career development; ◆ thinking of the feasibility of research topics for students.
The Middle stage of PhD	Data collection and data analysis <ul style="list-style-type: none"> ● Encouraging to keep writing; ● Passing relevant articles and theses.
The end of stage of PhD	Revising whole theses according to supervisors' feedback <ul style="list-style-type: none"> ● Fast: one to three day for a chapter, or one to two weeks for whole thesis; ● Giving detailed recommendations, even spelling; ● Keeping records accurately for comments on each students' version.

Source: Developed for this research

When reviewing the whole supervision process, some respondents indicated that their supervisors did not provide much guidance. The reason is that these supervisors trusted their students who had enough knowledge and abilities to complete their projects. The trust is derived from the training process, if these students had participated in supervisors' several projects and worked well for their supervisors.

The data suggests that ideal meeting contents are concentrated on three aspects. Firstly, students wished that supervisors could provide macro-guidance with clear targets. "It is an effective way to save my time; if my supervisor shows clear targets in my different study stages and he teaches some general problem-solving methods instead of teaching how to cope with every fine detail" (2C). Secondly, supervisors need to point out students' problems on time and provide the suggestions how to solve them to avoid students wasting too much time or becoming too irrelevant (1H, 2D, 2G, 3D, 3F and 3L). Finally,

supervisors need to supervise their students depending on students' individual features, such as students' prior education backgrounds, prior work experience, and career expectations (*1G, 1H, 2J and 3L*).

In summary, different meeting styles may focus more on different functions. Group meetings focus more on macro-guidance of the students' process, monitor supervisors' projects, and share general information for all students; regular meetings and irregular meetings after making an appointment in advance focus more on students' thesis guidance and individual problem-solving. Although most respondents indicated that regular meetings are a good way to motivate students to work hard and gain more benefits, due to the limited number of Chinese doctoral supervisors, group meetings seem more suitable for supervisors who have large numbers of doctoral candidates. Compared to regular meetings, irregular meetings, which are organized by students, are good at solving students' current problems in detail. Therefore, in terms of interviews' reflection, some supervisors used mixed meeting styles for guiding their students, because adopting mixed meeting styles could remedy the disadvantages from a single meeting style.

When discussing meeting styles supervisors used, students focus more on qualities and contents of their meetings, which is their measure of what is effective in a meeting with their supervisors. Chinese doctoral candidates expected to have more frequent meeting chances with their supervisors than they current have for improving their skills and solving their individual problems in time. Most students liked that, according to students' individual traits, supervisors could provide the effective meeting involved in clearing responsibility between students and supervisors, providing macro-guidance with clear targets, encouraging and assisting students to select their interesting topics, macro-monitoring students' progress. This finding reflects that Chinese candidates expected that their supervisors have strong responsibility and then supervisors would effectively carry out their duties for each meeting. The strong responsibility is connected with the traditional Chinese culture regarding *pinde* and the honour title of 'doctoral supervisor' in China.

5.1.2 Participating in supervisor's projects

The respondents suggested that participating in supervisors' projects is an effective approach to benefit both doctoral students and supervisors. Table 5.4 shows the aspects of benefits and disadvantages from participating in supervisor's projects.

From the perspective of all three groups: doctoral student, graduates, and supervisors, participating in the supervisors' project is a win-win process. The positive influences for students show in eight sections:

- improving students' professional knowledge, via searching literature, practicing in research methodology, and writing the reports relevant to supervisors' projects, which students participated in;
- improving academic abilities, and independent work ability on how to apply academic projects;
- increasing students' outcomes;
- enlarging students' network for helping them to complete their PhD theses, increasing students' publications, and benefiting students' career development;
- benefiting to remain in good relationships with supervisors via working with supervision in project process;
- increasing students' income which is from projects' funds, as *Responder 3H* mentioned that "supervisor-provided allowance for these candidates, where the allowance funding is from projects funding";
- benefiting to shape students' academic attitudes, such as rigor and diligence; and
- satisfying students' self-realization.

Considering the advantages of participating in supervisors' projects for doctoral students, some respondents from the student and graduate groups regretted that they had no opportunities or they only had little chance to take part in doctoral projects. "It was because they had no relevant knowledge and practical experiences in their disciplines, compared with the people who had experience of many projects" (3K).

Table 5.4: The influence from participating in supervisor's projects

	The influences from participating in supervisor's projects		Respondents
For doctoral student	Positive influences	Improving students' professional knowledge	1B,1C,1D,1K,2A, 2D, 2I, 2N
		Learning detailed professional knowledge	1C,1D, 1K, 2A, 2D, 2N
		Benefiting students' topic selection	1B, 1C, 2D, 2I, 2N
		learning research methodology	1C, 2A, 2D
		Improving academic abilities	1A,1D,1G, 2A, 2C, 2D, 2E, 2I, 2P, 3C, 3I, 3H
		Communication ability	1A,1D, 2E
		Coordination ability/ team work ability	1A, 1D, 2C
		Learning ability	1A
		Thinking ability	2D
		Writing ability	2D, 2E, 2P
		Time management ability	2I
		Compressive strength ability	2I
		leadership	2I
		Learning the process to application of projects	1G
		Increasing students' outcomes (publication)	1G, 1K, 2P
		Expanding networks	2H, 2M,3D,3F
		Benefiting to shape students' positive academic attitude	1A
		Benefiting to remain in closer relationship between supervisor and student	1C
		Increasing students' funds	1A, 1K
		satisfying students self-realization	1G
For doctoral supervisors	Negative influence	Too much workload or bring the profits conflicts between supervisors and candidates	1K, 2F, 2I, 2P, 3C, 3D, 3H,
	Positive influences	Increasing supervisors' outcomes (project outcome and publication outcome)	1G, 3C
		Benefit supervisors' enlarging professional knowledge and thinking way from different perspectives	1K, 3C
	Negative influences	Spending more time and energy to guide new students how to work in supervisors' projects	1G, 1K
		Maybe increasing complains from doctoral students	1G, 2F, 2I, 2P, 3C, 3D, 3H,

Source: Developed for this research

All three groups agreed an ideal approach should be a win-win process, as *Student 3C* reviews his PhD experiences and then he states:

Providing opportunities for candidates is a mutually beneficial process for both supervisors and doctoral candidates. The aim of an approach of participating in supervisor projects is to benefit graduates by increasing their abilities. At the same time, this approach also promotes project executions for doctoral supervisors.

The respondents within the supervisors' perspective further pointed out two benefits for supervisors. Firstly, supervisors have stable assistants, who can help a supervisor do great amounts of work in detail. "My students, participating in my projects, can help me do lots of detailed work, such as data collection and sorting out relevant data and literature. It benefits me to increase my academic outcomes" (*IG*). Secondly, supervisors' gain new ideas through working with their students. "I always gain new ideas from the reports, which are provided by my students for my projects, and I feel that we learn from each other by working together" (*IK*).

However, some respondents from all three groups interviewed recognised that there are several problems relevant to participating in supervisor's projects, which could bring negative influences on the doctoral supervisory process. Within the student and graduate perspectives, complaints from responders' peers focused more on too heavy project tasks, and claims of too little remuneration or even of no remuneration. The complaints may have derived from profits conflict between supervisors and students. For example, *Graduate 3C* recognised a current trend that some doctoral supervisors only focused on the project's progress instead of training doctoral candidates.

Student 2I further heard that "some supervisors delayed students graduation only because they needed students to contribute more on supervisor's projects". So, when *Student 2P* discussed this problem, he suggested strongly that "supervisors should not regard their students as cheap employees or free labour as a slave".

From the supervisor perspective, the respondents found that several students complained of too much pressure and being too busy, due to working for supervisors' projects. Furthermore, supervisors recognised that they also need to take risks to employ their students as their projects members. "Most PhD students had no project experience, and

they could not work independently as an experienced project member. Sometimes I need to spend more energy and time to show my students how to work better” (1K). *Responder 1G* agreed: he further indicated that “if my students damage my projects, I am charged with high risks both on my projects and on broken supervisor-student relationships”. However, because of benefits for students, most supervisors still prefer to use this approach to supervise their students, as *Supervisor 1G* says:

Even if students have complaints, I preferred to provide joining projects opportunities as much as possible for my students. To be honest, I regretted that I had no extra projects experience when I was a PhD student. In fact, students can gain many benefits from participating in different projects. If they relaxed when they were PhD students, they might complain more after they become an academic in the future.

Therefore, in order to reduce negative influences from students participating in supervisors’ projects, supervisors need to use this approach effectively. Firstly, supervisors need to consider students’ individual factors, before offering students the chance to participant in supervisors’ projects. The respondents suggested that the opportunities of joining projects should benefit the students who are full-time (1C and 2N), who expect to become academics, and whose own research topics matched with supervisors’ projects (1I, 2J, and 3F), because these students are interested in working as research assistants and they are more available compared with part-time students. Secondly, supervisors need to consider from students’ perspectives and only suggest students who have abundant abilities (2E), to join their interesting projects. “Supervisors cannot force students into working for their projects, because this action will increase students’ rebellious moods” (1B). Due to the influence from present policy, such as *huj*i policy, and the traditional Chinese culture, such as the special meaning of studying, some doctoral candidates undertake and continue their study for some special reason (such as changing *huj*i from farmer to city dweller). So the majority of this type of candidates may not be interested in joining the doctoral supervisors’ projects.

5.1.3 Coursework

Forty-nine comments, from 23 respondents, raise an issue whether coursework could influence doctoral supervisory process or not. All three groups’ interviewed pointed out that in order to satisfy doctoral degree requirements, doctoral candidates have to complete obligatory and elective courses in their early study stage in China.

Several responders, from both students' and graduates' interviewees, do not think that courses are useful for them, and the contents of courses are not valuable for the further research, as *Responder 2P*, who was from Year one of PhD students, stated:

My supervisor required me to satisfy the requirements of academic credit stipulated by my university, in first year of PhD. Then I could pass smoothly the integrate examination, which is an effective guarantee to make sure that I can stick on the timeline about my further research process. However, I do not think these courses will provide me any help in my further research.

Another graduate responder, *3D*, expressed the same idea: "the reason for this result is that there are problems of course design. For example, the courses are not valuable for candidates in their subsequent research". Complaints, which are from students on the problems of course design, are heard and recognised by some supervisors in the study. However, an odd situation occurred, as supervisor *IG* described. She/he found that, although some students complained about the course, all course evaluations showed satisfaction, and the assessment scores, which students gave, were very high. *IG* said "if students were not satisfied by these courses, they should provide their dissatisfied feedback in the process evaluation check. But I am confused why students always provided strong positive feedback for these not valuable courses." *Student 2F* says a possible reason for this result is that students, who are in the first year of their PhD, focus more on satisfying the requirements of academic credit, and then they ignore the functions of coursework. "When I did my PhD in the first year, I focused more on completing my credit points. However, once I satisfied the university's requirements, I focused more on my learning interests and knowledge enlargements since the second year of my PhD".

On the other hand, the majority of respondents from three group interviews, especially within the supervisors' perspective, indicated that coursework provides effective help for the doctoral supervisory process. *Responder 1H* said that "coursework contributes to the doctoral supervisory process, because all coursework design focuses on delivering professional knowledge and improving essential academic ability for doctoral candidates". Similarly, *Responder 1K* commented that "the target of coursework design is about improving doctoral students' integrate *suzhi*, which is needed to match their future career requirements and the targets of doctoral supervision".

The respondents recognised that the contents of coursework is valuable for doctoral student in four aspects:

- improving professional knowledge,
- benefiting theses' quality and thesis writing,
- increasing academic ability, and
- maintaining a close relationship between supervisors and students.

Firstly, the responders emphasised that coursework is one effective approach to help students learn systematically theoretical knowledge in their field (*1D, 2D, 2F, 2G, 2O* and *3G*); learn the current popular research topics in their fields (*Respondents 1F, 2O* and *3A*), which benefit students to start to read and write their literature review (*1D, 2G, 2O, 3D* and *3G*); provide students with more ideas to select topics (*2F* and *3G*); and enlarge students' knowledge in relevant academic fields (*1D, 1H, 2O, 3A* and *3D*).

Supervisor 1H suggests, "doctoral candidates, especially part-time students in the Management discipline, need to have broad relevant knowledge in relevant disciplines. Attending the appropriate courses benefits students to understand fundamental knowledge systematically within a short time". Furthermore, students, who have the Management field background either in working experience or studying experience, benefit from coursework to update information on current popular academic issues which benefit doctoral students to select their research topics. For example: *Student 2O* indicated that "lecturers kept analyzing current popular issues and relevant literature review in my area. These courses provided me with many good ideas relating to selecting a research topic. It benefits me to start my research". *Student 2G* agreed with *2O*'s view, "I participated in a same course each year. I found that the lecturer, who taught this course, added many updating information in her course every year. I felt this course was very useful for my research".

Secondly, some comments from all three group respondents emphasised that the courses which concentrate on research methodology benefit students to improve their theses' quality and thesis writing. When *Student 2J* reviewed his thesis writing experience, he strongly supported this opinion. "Research methodology courses, especially SPSS course, could help me on my thesis analysis. I appreciated that I learned these courses prior to

starting my research, because this course assisted me to have a big picture prior to writing my thesis". Similar to 2J's opinion, the supervisors' perspective also pointed out that introducing the knowledge on research methodology benefits students to understand the whole theses' writing process and then improves students' theses quality.

Thirdly, some students' and graduates' respondents found that coursework benefited them to improve academic abilities, including writing, analysing, problem-solving, thinking, communication, and teaching. Most doctoral supervisors, in order to encourage students' academic ability via courses, emphasised that they adopt different teaching approaches, such as case study, using discussion group, or providing the presentation opportunities for achieving the training targets.

Finally, some supervisors found that attending courses run by doctoral supervisors benefit in maintaining good relationships between their students and supervisors. "The more discussion on academic issues that occurs in my class with my students, the more understanding between students and me, the better the relationships have remained" (II). The respondents from students and graduates' interviewees agreed with this point of view, and they also recognised that participating in their supervisors' course benefits them to understand more about their supervisors' academic and working styles, which could support the build-up the close relationship between supervisors and candidates. Due to the influence from the traditional culture on the student-teacher relationship in China and the present selection criteria of doctoral supervisors, the positions of both teachers and supervisors are the honour symbols. The majority of Chinese candidates respect their supervisors, which may lead to the distance between supervisors and candidates at the early stage. However, joining the supervisors' courses could help them to break the ice.

5.1.4 Group activities

During discussions, the respondents from the three groups commented that group activities are one of the effective approaches in helping to manage students' timelines, enlarging students' networks, providing emotional support, maintaining good relationships between students and supervisors, and improving students' integration of professional *suzhi*, involving professional knowledge and students' abilities in their supervisory process.

The data shows that most respondents joined the different types of group activities, which are encouraged by their supervisors, during their supervisory process. As Appendix 6-2 shows, group activities included reading groups or discussion groups; workshops and seminars; joining *tongmen* social activities, such as dining together, joining a holiday party, a supervisors' birthday party, sport activities; and participating in student associations.

Different types of group activities have different advantages for training doctoral students. Firstly, running reading groups or discussion groups benefits supervisors to monitor students' progress (*1A* and *1J*) and "remain in good relationships with students" (*1I*), and also helps students to improve professional knowledge (*1D*, *1E*, *1F*, *2G*, and *2M*), develop academic ability (*1F*, *1H*, *1I*, *2G*, *2M* and *2O*), and "shape academic attitudes and personality" (*1C*). Reading groups or discussion groups in this research are regarded as a formal type of academic group activities, which are divided into two styles, as *Responder 2J* explained:

One style is that participants focus on the discussion on an article each week or fortnight. The other style is that supervisors meet students' each year for assigning reading task to their students and letting students write a book review for each book or article.

The respondents within students' and graduates' perspectives further explained that the members from the first style group, which run each week or fortnight, are normally non-*tongmen* or from different universities (*2O*). On the contrary, the members of the other style, which occur each year, are normally *tongmen* (*2G* and *2M*). The requirements of readings quantity vary from one book each semester (*1I*) to 200 books during the whole study process (*1E*) depending on different supervisors.

Secondly, attending workshops and seminars helps students to "enlarge professional knowledge in their academic field and improves students' thinking ability and communication ability" (*1D*). *Student 2O* and *Graduate 3A* supported strongly *this* point of view. *Student 3A* mentioned that "there are some people with authority, who are invited by my university, to make speeches [and run workshops] in certain topics for doctoral students. I got lots of ideas, which benefit me to start my research." *Student 2O* also emphasised that "these workshops and seminars can help me to enlarge my knowledge and broaden my ideas".

Thirdly, the data from all three group interviews indicated that joining *tongmen* social activities benefit to provide students with emotional support, establish close relationships among *tongmen*, and maintain good relationships between supervisors and students. *Student 2F* indicated that “all my current *tongmen* have got together and gone out to play Karaoke with my supervisor every three or four months. This group activity benefits me to build up closer relationships between my supervisor and my *tongmen*. As a supervisor, *1H* agreed with *2F*’s idea and she also preferred to organise these group activities regularly. The supervisor’s target of organizing social activities is that “creating an informal and comfortable atmosphere, and building up more opportunities to make students (*tongmen*) know well each other, help us to communicate easily in the future (*1H*)”.

Finally, during discussion on participating in activities relating to student associations, different student and supervisors’ perspectives are presented. *Student 2P* indicated that as doctoral students in the Management field, joining the students’ association and being a director in this community is good for doctoral students, especially for students, to improve their organisation ability and to shape their leadership skills. *2P* mentioned that “several of my *tongmen* worked in student associations and I found that they had strong, independent work abilities, such as organisation ability. These abilities were shaped through working as leaders of the student association, and these skills would benefit their future working as managers”. However, some supervisors have the totally opposite opinion. For example, supervisor *1A* emphasised that working at student association is not useful to improve doctoral academic ability. “I do not like my doctoral candidates wasting their time and energy on these unnecessary things, which are not useful for their improvement in the academic field”.

5.1.5 Internship

Twenty respondents reported that providing internship opportunities is one of the effective ways to help students to improve their professional knowledge, abilities, and benefit their further career. As Appendix 6-3 outlines, internships for doctoral students included three forms: working in relevant positions in enterprises or in public service, being a research assistant, and teaching.

Each form of internship was reported to provide particular benefits for doctoral students. For example, although some students' respondents recognised that only limited internship chances existed in public service for students (2D and 2M), in order to increase working experience and improve students' practical independent working ability, four doctoral supervisors strived as much as possible to use their networks to help students who expected to work in enterprise or work in public service to find internship opportunities.

Being a research assistant helps students to improve professional knowledge (1C, 2A, 3D, and 3F), promotes integration abilities such as the communication ability (1J, 2A, 3F and 3K), organisation ability, which has been increased by organisation students' discussion in the class (1C), shapes students' personality, such as "responsibility which is trained by providing feedback for their students" (1C), patiently and rigorously working attitudes (2A) and forming teaching styles (1G, 2A and 3F). .

Providing teaching experiences benefits students to know well the academic working environment, improve effectively professional knowledge and teaching ability. Most respondents from students and graduates' interviews who gained this chance underline the help from their supervisors. Within the supervisors' perspective, believing the advantages of teaching experience, they preferred to provide teaching internship chances for students. *Responder 1I* mentioned that "when I taught as a formal lecturer, due to being without teaching experience, I was very nervous and I had to stop in the middle of class. That is why I try my best to provide opportunities for students to teach". Similarly, *Responder 1G* emphasised:

I provide at least two teaching opportunities in my class each semester for doctoral students. Although I knew that this action would bring negative influence for my final teaching assessment, because my doctoral students' teaching ability is not as good as mine so far, it would benefit doctoral students' career development and skills improvement.

Although most comments on internship focused on showing the advantages and benefits, which is supported by all three group interviewees, some problems exist, as pointed out by some graduates' responses. For example, *Responders 3D* and *3F* said that supervisors only supported student internships in the periods when there were not many supervisor projects for students to be involved in. *Responder 3I* provided a possible explanation of conflicts in the supervisors' perspective between doing supervisor projects and

internships. “Supervisors have their own projects. Actually they do not expect that students go out to have internships. If students have internships, they cannot work much for supervisor’s projects.”

5.1.6 Attending conferences

As the data below suggests, the majority of comments from the three different group respondents all indicated that attending conferences is regarded as an effective approach to influence positively doctoral supervisory processes. Most supervisors encourage their students to participate in academic conferences which are related to students’ research topics, and students and graduates expect to attend conferences, because of four main benefits. These benefits include expanding research orientations and enlarging professional knowledge, improvements of individual abilities, increasing the number and quality of publications, and expanding networks.

Firstly, some respondents emphasised that attending conferences would help students in learning current popular issues, enlarging their professional knowledge, and then quickly finding their interesting research topics. *Graduate 3A* explained that “Academics cannot open their research visions without academic communication...When academic experts...got together and discussed current research topics, candidates would get benefits from these ideas”. He felt that “even if students only listened to a bit of these discussions, the benefits which they gain were better than just only reading several months by themselves”. The respondents from the student group support this point of view. *Student 2N* appreciated that her supervisor provided some opportunities to participate for free in conferences. “My supervisor ran an annual academic conference. He encouraged all his doctoral students to attend conferences for opening their eyes [in the academic field]”. Similar to respondents from students and graduates groups, supervisors’ encouraged students to participant in conferences as one effective approach to benefit students to “enlarge professional knowledge” (*IK*), “get to know academics in students’ field” (*IA*), “learn popular international research issues in relevant disciplines” (*IA*) and “understand the practical issues in industry” (*ID*).

Secondly, when doctoral students took part in conferences with their supervisors, students' academic abilities could increase unconsciously. For example, *Graduate 3B* supported this point of view. The reason for this result is that "candidates will be forced to do a lot of study and put in much effort to prepare relevant academic content, if candidates' speeches are to achieve a level which supervisors expect". Therefore, "pressures on candidates' discussion or presentation in conferences can stimulate candidates to improve their academic abilities". The respondents from students and supervisors group agreed with *graduate 3B's* opinion. *Supervisor 1F* further emphasised that attending conferences helps students to improve their integrated abilities, such as "communication ability, presentation ability, thinking ability".

Thirdly, participating in conferences can increase opportunities for publication, which is beneficial for doctoral students to achieve graduate requirements. In China, most doctoral candidates need to satisfy publication requirements stipulated by their universities, before they can achieve their doctoral degrees. Seven comments (from *Respondents 1C, 2H, 3C, 3F, 3H, 3I, and 3K*) mentioned that participating in conferences could solve publication problems for doctoral candidates. The data reported that from students and graduates' perspectives, the majority of doctoral candidates expect that doctoral supervisors can solve financial problems associated with publications. For example, supervisors could apply for reimbursement to candidate of fees, such as conferences registration, travel (whether international or domestic), and publication. And these fees always could be deducted from budgets of doctoral supervisor projects' budgets. Some doctoral supervisors understand students' publication demands, and they (*1B, 1C, and 1K*) also preferred to provide necessary funds, such as travel fee, conference registration fee, and accommodation fee, to support students to attend conferences.

Finally, participating in conferences is a good approach for enlarging networks for doctoral candidates, as has been pointed out by respondents from students', graduates' and supervisors' groups. So the data suggested that some supervisors encourage students to participant in conferences related to students' research topics, and even some supervisors introduce students to experts in conferences to help students to enlarge their network. This way is important for career development for the doctoral candidates, especially for candidates who want to become academics in the future,

To conclude, according to 39 respondents' suggestions, six types of supervisory practices influence doctoral supervisory process. The six types of supervisory practices include meetings, participating in supervisor's projects, going to courses, joining group activities, participating in internships, and attending conferences. The following section presents data analysis results relating to *pinde* education.

5.2 *Pinde* education

All respondents commented that the supervisor's *pinde*²⁶ and *pinde* education influence the whole doctoral supervisory process. "Supervisors should not only focus on knowledge delivery, but also need to concentrate on cultivating people at the same time" (1A). Two reasons for the importance of cultivating people are reported by respondents. One reason is that "academic attitude cannot be separated from individual *pinde*. Shaping student's academic attitude is one of the supervisors' responsibilities" (1F). The other reason is that students, especially full-time and young students, will consciously or unconsciously resemble supervisors' behaviours and *pinde* characteristics (1I, 2N, 2L, 2O, 3C, 3F and 3J). "Bad behaviour practices and disgusting *pinde* characteristics influence students' development negatively" (1I).

The data shows that supervisors' *pinde* influences students by two approaches: being an example with good *pinde* characteristics, and engaging *pinde* education. The majority of respondents adopt the way of being an example with good *pinde* characteristics instead of using *pinde* education, because "pointing out students' shortcomings directly may bring conflicts between supervisors and students". However, some respondents keep pointing out students' bad behaviours and disadvantages relating to their personality. "If I, as a supervisor, do not show this problem in student's study stage, this problem will be shown in her or his working stage. And then this problem will bring more negative influences to my student" (1A).

Table 5.5 displays the factors relating to the importance of the influences on doctoral supervision in descending order, depending on the frequency of comments on *pinde* characteristics from participating respondents:

²⁶ *Pinde* introduced in Chapter 2 literature review.

Table 5.5: The relative influence of supervisors' *pinde* characteristics

Codes related to supervisors' <i>pinde</i> characteristics	Frequency of comments	Numbers of respondents	Respondents
Responsible	53	24	1A,1C,1D,1E,1F,1G,1I,1J,1K, 2A, 2C, 2E, 2F, 2G, 2H, 2K, 2L, 2M, 3B, 3E, 3F, 3J, 3K
Caring for students	39	20	1A,1B,1F,1H,1I, 2A, 2B, 2C, 2D, 2G, 2I, 2M, 2N, 2O, 2P,3A, 3C, 3D, 3G, 3K
Rigorous	27	18	1A,1F, 1G,1H,1I,1K, 2A, 2E, 2L, 2H, 2O, 3B, 3C, 3D, 3E, 3F, 3H
Tolerant and Broad-minded	19	16	1A,1F,1G, 2A, 2B, 2C, 2D, 2H, 2M, 3A, 3B, 3D, 3H, 3L, 3J, 3F
Honest	3	3	1F, 2C, 3H
Diligent	6	4	1A, 2A, 2E, 2P, 3A
Not being too materialistic	6	4	1A 2B, 2L, 2N, 3A
Charitable	3	3	1F, 2M 3F
Sharing resources	3	3	1J,2C, 3F
Just	3	3	1B, 2N, 3B
Modest	1	1	2G

Source: Developed for this research

5.2.1 Responsible

The data shows that the characteristics of responsibility shown by doctoral supervisors contribute to doctoral supervisory process. The respondents, who commented on how a responsible supervisor is important to the whole supervisory process, indicated that responsible supervisors “are keen to communicate with students” (1J), offer appropriate time and energy to guide students in academic processes (1J, 2E, 3E, and 3F), organize effective formal and informal academic activities for students (1I, 2L, 3E and 3F), consider students’ career development (1G and 2L), and pay attention to the quality of theses and personality training (1A,2L, 3B, 3E and 3F).

The majority of respondents recognised that supervisors who are responsible motivate students to complete theses on time, and benefit to improve quality on both theses and personal training. “It is hard to tell who needs to take a main responsibility if students drop off from a doctoral program. However, I found that the more supervisors are responsible, the easier students work on their projects” (1C). Some respondents from

students' and graduates' interviewees pointed out that a responsible supervisor is necessary to students, because students mainly gain the training systematically from their supervisors.

This is emphasised from another point of view. Some respondents indicate that irresponsible supervisors bring many negative influences, such as reducing the qualities of doctoral education (2E and 3B), delaying candidates' graduation (2E, 3F, 3H and 3J), not gaining necessary abilities (2E), or losing a chance to gain a doctoral degree for students (3H). For example, *Responder 2F*'s friend complained that his supervisor used him as "a slave laborer", and this supervisor did not think of the student's research. These things led to the breakdown of the supervisor-student relationship and then this student stopped his PhD journey.

Some supervisors have paid much attention to the importance of supervisors' responsibility, as *Responder 1F* describes. "I provide help as much as possible for my students since I am a doctoral supervisor, because I remembered my own painful self-learning process when I was a doctoral student and my supervisor was not available for me". However, the data shows some supervisors have only limited energy and time to allocate to each doctoral candidate. Discussing these irresponsible actions from doctoral supervisors, *Responder 3F* explained why Chinese doctoral supervisors are not available for candidates:

Compared with the number of doctoral candidates, the number of Chinese supervisors is very limited. In general, doctoral supervisors have only limited energy and time for each candidate. This present situation for doctoral supervisors leads to the complaint of a supervisor's scant time for a candidate.

Supervisor 1J also provided an explanation on this issue.

Academics, especially doctoral supervisors, are too busy. My working life involves six aspects: updating academic knowledge regularly, teaching, doing projects, examining and appraising theses, supervising students including undergraduate students and postgraduate students, and joining social activities. I have to balance my time and energy, so I only take one doctoral student each year, otherwise I will be not available to supervise each student effectively.

5.2.2 Caring for students

Respondents from the three groups said that supervisors looking after students in both study and living areas provided them with much strong support in their PhD progress. For example, *Student 2A* felt that

I would not move on my thesis and I could not pass my final thesis assessment without my supervisor's caring, even if he is too rigorous to me. However, I believed if my supervisor did not care for me, he would not point out my shortcomings.

Graduate 3A agreed and he believed that “if a supervisor keeps looking after their students, even if the supervisor cannot provide necessary help for their individual problems, students still can get emotional support and they will feel better”. Supervisor responder *1A* also recognised the importance of caring for students: “Supervisors need to try their best to care for doctoral students, which benefits to reduce the communication barriers with students”.

Table 5.6 shows the examples and comments on how supervisors care for doctoral students in the following four aspects:

- students' health including physical and mental health;
- support of individual emotional issues;
- the development of career; and
- providing the necessary help to students in thesis writing and financial support.

Although most respondents recognised how important caring for students is in the doctoral supervisory process, the modes and methods of caring for students, issues not mentioned from supervisor's reflections, also need attention. Within students' and graduates' perspectives, appropriate approaches of caring for students are significant. *Responder 3C* provided a good example of how her supervisor successfully took care of her. “My supervisor chatted with me about my husband and my child. I could feel that he took care of me”.

Table 5.6: The comments on four aspects of caring students

Contents and examples related to caring for students	Respondents
Students' health issue <ul style="list-style-type: none"> ● Body health e.g.: "I took care of one of my students when his leg was injured and he stayed in hospital. This student told me that I am like his family member in his mind since this thing occurred." e.g.: "My supervisor kept suggesting I should to go to gym or do exercises regularly, because good health is the foundation for study and better work in the future." ● Mental health e.g.: "The issue of students' mental health needs to be recognised by supervisors. Too much pressure will bring negative influence to their further study." 	1A, 1I, 2D, 2G (1A) (2D) (1I)
Students' individual emotional issues <ul style="list-style-type: none"> e.g.: "I always provide suggestions when my students have trouble in their life, because students like to chat with me about their individual problems, which means they trust me. So I need to care for their individual life problems, which benefit our further communication". e.g.: "I care for my students in life and they like to chat with me, which benefits me to learn more about my students". e.g.: "my students always bring little gift, such as food from their hometown, for me. I never reject it, because students will feel sad if I refuse it". 	1A, 1F, 2B, 2G, 2I, 2M (1A) (1F) (1F)
Students' development of future career <ul style="list-style-type: none"> e.g.: "I think of all students' career development, which is also paid much attention by my students. I try my best to provide support when they find jobs". 	1H, 2D, 2I, 2M (1H)
Students' academic problems and financial issues <ul style="list-style-type: none"> e.g.: "I keep my eyes on my students. Once my students face academic problems, I put my great efforts to help them solve problems as soon as possible". e.g.: In order to encourage students to participant in conference and publication, supervisors provided conferences registration fee, and publication fee for students. 	1B, 2D 2I, 2O (1B) (2I)

Source: Developed for this research

On the contrary, Responder 3B gave us a negative example about caring for students by her doctoral supervisor. Even if she appreciated that her supervisor took care of her, but too much inequality can make the candidate feel uncomfortable, as the following quotation shows.

My supervisor took care of my life, but it is hard to communicate with my supervisor about her individual problems. On the other hand, as a student, my academic level is much lower than my supervisor. When I stayed with my supervisor, I could only accept and could not give anything to her. This inequality feeling make me uncomfortable...

Responder 2N had similar feeling with 3B. "I am a very independent person; if my supervisors takes too much care for me, I will feel not comfortable".

Therefore, as this data shows, appropriate caring for students by supervisors is a good way to affect positively doctoral supervisory process. However, as doctoral supervisors, they also need to recognise that too much concern and inequality in communication can make students feel uncomfortable.

5.2.3 Rigorous attitude

The respondents from all three different group interviews found that supervisors' rigorous academic attitude benefits to motivate students to work hard in the whole supervision process, and contributes to shape students' rigorous attitude, as the following quotations from the supervisors' perspective show. "I have a good supervisory record and all my students passed their examinations with good achievements. One of the important reasons for this result is that I keep a rigorous academic attitude to work with my students (*1H*). Furthermore, *Responder 1A* suggested that supervisors have responsibility to shape rigorous characteristics for students. "As a supervisor, I need to let them know their inappropriate behaviours, and I require students to deal with everything rigorously, because a rigorous attitude benefits student to comply with standards which influence their career development positively".

From the students' and graduates' perspectives, most respondents pointed out that they gain the benefit from supervisors' rigorous working attitude. For example:

My supervisor is rigorous, which influences people around him positively. I usually work hard, because I will try my best to achieve the target which he formulated. I feel embarrassed to provide the low level articles without good preparation to my supervisor (2A).

When *Responder 3I* reviewed her PhD studying period, the learning experience is similar to 2A's opinion:

He [my supervisor] is very rigorous in academic areas, such as his serious academic attitude, rigorous thesis and writing styles, serious conformity of data truth, and accuracy of references. He did not teach me anything proactively, but in fact, I already learned his rigorous attitude both in academic work and in his life through his daily behaviour.

3I further emphasised that she understood more about the importance of supervisors' rigorous working style after she graduated. "I found that a good supervisor needs to keep

using a higher standard for her students, because a qualified academic should be able to withstand the academic test”.

Although supervisors’ rigorous working attitude can bring many benefits for students, when supervisors keep rigorous attitude to work with students, they also need to recognise the modes and methods. Inappropriate modes and approaches can bring negative influences. For example, *Graduate 3D* heard the complaints from her friends about negative influences from an excessively rigorous supervisor. “My friend’s supervisor had too high standards for his writing. His supervisor required that if he did not write a really good quality journal paper, he should not publish anything... this student was depressed for his whole study period”. *Responder 1A*, as a doctoral supervisor, has a similar working experience when he supervised a doctoral student. “I have intensive and rigid relationship with one of my students. She never contacted me after she graduate. I think that I was too strict with her during her study process”. *Supervisor 1H* provided the possible reason for this issue, which as *Graduate 3I* mention. “Some students cannot understand supervisors’ objectives and actions, which benefit student long-term development, until they graduate several years or they become supervisors”.

In order to reduce negative influences from supervisors’ rigorous working attitude, *Responder 1A* suggested that when supervisors provide suggestions strictly to students, supervisors need to pay much attention in three aspects:

- offering suggestions tactfully and consistently;
- in private informal environment;
- giving suggestions only in front of the student who had inappropriate behaviours.

5.2.4 Tolerant and broad-mindedness

Nineteen comments showed that tolerance and broad-mindedness are important characteristics, which need to be owned by supervisors, to influence doctoral supervisory process.

Tolerance and broad-mindedness can be shown by supervisors in both the academic field and life areas. Firstly, in the academic area, supervisors need to accept gladly different

points of view from their students, as *Responder 2D* says. “As a supervisor, s/he needs to have broad-mindedness, and even accept the fact that some students are more outstanding than their supervisor”. The reason is: “when a supervisor is really broad-minded, arguments focusing on some academic issues between supervisors and students may happen. These arguments help students improve communication ability, and it also benefits the developments of the discipline” (2A). *Graduate 3F* further indicated “when people solve problems, they may be using different methods to solve the same problems. So a good supervisor needs to have a broad-minded attitude, otherwise, it may negatively influence their doctoral students”. *Supervisor 1G* also had similar experience to *Respondent 2A* and *3F*, as the following quotation shows.

When I was a PhD student, the content of one of my published articles concentrated on criticizing my doctoral supervisor's view in his published article. My supervisor was not angry to me; however he cited my article when he published a book. The broad-mindedness of my supervisor's character benefitted me to shape my critical thinking ability. So when I become a supervisor, I copied my supervisor's way and I prefer to accept different points of view from others.

Secondly, in the life area, the data suggested that supervisors need to understand students and forgive students' mistakes. For example, “a good supervisor should be tolerant and s/he then should show students how to correct mistakes later” (2H). Within the supervisor's perspective, *1A* supported *2H's* views. “Supervisors need to think within students' perspective and sometime turn a blind eye when students have mistakes, especially in their life area. This behaviour of supervisors benefits to build close relationships with students”

On the contrary, if a supervisor is not broad-minded enough, it will bring negative influences to students, as *Responder 2M* stated: “following my prior supervisor without a broad-minded attitude, I was bound in both my thinking ways and behaviours. It was not good for my development”.

5.2.5 Other characteristics

There are only few respondents' comments on the importance of the following seven characteristics, which are mentioned as should be owned by supervisors. As Table 5.7 outlines, these characteristics include diligent work attitude, non-materialistic approach

to research, charity for community, sharing resources with peers; preferring justice for students, honesty, and modesty. The comments on these characteristics in detail are displayed in Table 5.7.

Table 5.7: The typical comments on other supervisors' characteristics

Characteristics	Comments	Respondents
Diligence	<p>e.g.: "Students need to spend lots of energy and put much effort into their study during the PhD process. Students need to have a diligent academic attitude which can support them to face the pressure to complete this task finally" (1A).</p> <p>e.g.: "I always remind myself: do not be lazy, because I worked with a very diligent supervisor, otherwise I could not keep up with my supervisors' step and it might not good for my PhD process" (2A).</p> <p>"She [supervisor] shaped me to become a diligent person. She kept reminding me to try to do everything as soon as possible instead of procrastinating" (3F).</p>	<p>1A, 2A, 2E, 2P, 3F</p> <p>(6 comments)</p>
Non-materialistic	<p>e.g.: "Supervisors should being a good moral example and have a peaceful mind which benefit students to focus on research" (1A).</p> <p>e.g.: A supervisor who is too materialistic, would bring many negative influences for supervision. Some students are regarded as slave labourers by supervisors, who are too materialistic, like treacherous businessmen. This phenomenon leads to many complaints from PhD candidates and even leads to the relationship between supervisor and students breaking (2B).</p> <p>e.g.: Many people intended to get advantage via doing academic job for their good fortune, such as finding a job to change their fate or become rich, but my supervisor is not a person with these purposes. I learned from my supervisor that I needed to be undisturbed facing my life, and not to have too many utilitarian purposes (3A).</p>	<p>1A, 2B, 2L, 2N, 3A</p> <p>(6 comments)</p>
Charity	<p>e.g.: "I like to join charities, which could increase responsibility, when they have a clear mission" (1F).</p> <p>e.g.: "When the earthquake occurred in Wenchuan, my supervisor donated ¥20,000. I felt that she was kind-hearted and she took care of these victims. This characteristic attracted me to follow her and I want to become a similar person to her" (3B).</p>	<p>1F, 2M, 3B</p> <p>(3 comments)</p>
Sharing resources	<p>e.g.: "Supervisors who are keen to share resources, such as information of projects and conferences, benefit students to improve academic ability quickly" (1J).</p> <p>e.g.: "She [supervisor] encouraged me to share academic information with others instead of retaining it. However, when I shared, I also need to consider the copyright for myself" (3F)</p>	<p>1J, 2C, 3F</p> <p>(3 comments)</p>
Justice	<p>e.g.: "I like my supervisor's characteristics, such as justice. That is a solid foundation, and it benefits for effective supervision across my whole PhD supervision process"; and "I feel that she is just to all her students. And I unconsciously resemble her just behaviours" (3B).</p>	<p>1B, 2N, 3F</p> <p>(3 comments)</p>
Honesty	<p>e.g.: "Shaping honest characteristics are important to students' career development both in academic and non-academic areas. Most employers pay much attention to employee's moral characteristics, normally considered more important than other factors, when they engage an employee" (1F).</p>	<p>1F, 2C, 3H</p> <p>(3 comments)</p>

Characteristics	Comments	Respondents
	e.g.: “Supervisors are not expert in every field. They need to show honesty in front of students when they do not know some knowledge, instead of hiding” (1F).	
Modesty	e.g.: “My supervisor is modest and he did not show off” (2G).	2G (1 comment)

Source: Developed for this research

5.3 Conclusion

This chapter showed the findings focusing on exploring how the cultural custom and policy practice of China impact on the daily doctoral activities. The doctoral activities described the two main education approaches in the Management discipline in China. They are group way education and *pinde* education. The next chapter will introduce other findings about supervisor factors, student factors, the relationship between supervisors and students, and other academic support services.

Chapter 6: **Data Analysis 2**

Chapter 5 presented the data focusing on daily doctoral practices. As Figure 6.1 shows, this chapter introduces the data in three main elements of doctoral supervision within the Chinese context: the factors related to doctoral supervisors including the relationship between doctoral supervisors and students and supervisor factors; the factors related to students; and the academic environment.

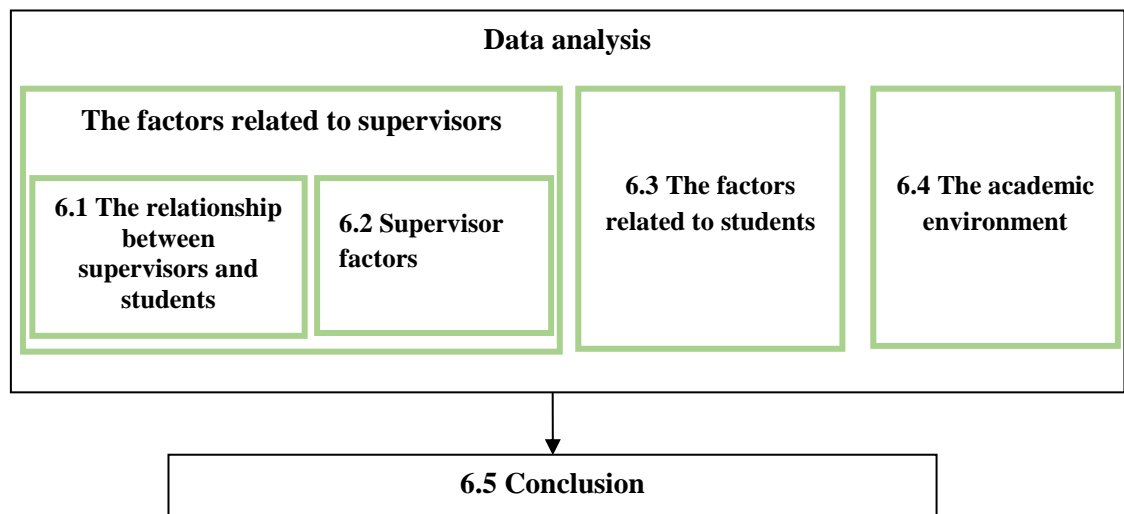


Figure 6.1: Structure of Chapter 6

Source: Developed for this research

This chapter presents first data analysis of how the cultural custom and policy practice of China influence the responsibilities and strategies of Chinese doctoral supervisors, involving in two elements: the relationship between doctoral supervisors and students (Section 6.1) and the factors related to doctoral supervisors (Section 6.2). This chapter also shows the data on how the cultural custom and policy practice of China motivates students to undertake and continue their PhD (Section 6.3). The data related to other factors involving the academic environment, such as peers, lecturers, family members is discussed in Section 6.4.

6.1 The relationship between supervisors and students

The data below suggests that sustaining comfortable relationships between supervisors and students plays a vital role in influencing the doctoral supervisory process positively. This section presents the discussion on five types of supervisor-student relationships, which are distilled from the three groups' interviews, and then shows what the ideal relationships expected by respondents are, and how these relationships influence supervisory processes. The interviews suggest, as Table 6.1 shows, the five types of relationships include: a professional supervisor (Lecturer)-student relationship; a relationship that is like friendship; parental relationship; peer-colleague relationship; and work relationship.

Table 6.1: Coded relating to the relationship between supervisors and students

Themes	Coded	Total Frequency of comments	Total Respondents
The relationship between supervisors and students	A professional supervisor relationship	129 comments	39 respondents
	A relationship like friendship		
	A parental relationship		
	A peer-colleague relationship		
	A work relationship		

Source: Developed for this research

Each type of relationship was reported to have particular advantages and shortcomings which influence the doctoral supervisory process. Comments on the descriptions about what the relationships look like, and statements of the advantages and disadvantages of each form of relationship are provided in Appendix 7-4.

As Appendices 7 and 8 show, the professional and serious lecturer-student relationship is a fundamental relationship which is mainly sustained by doctoral supervisors. Remaining only in a single professional lecturer-student relationship in academic fields is easier to keep supervisors' power and authority in the academic area, to avoid involvement in too much of students' private problems, and to provide effective and strict academic training for students. As *Responder 21* indicated that "I appreciated my supervisor who is not deliberately making a closer relationship with his students, because sustaining only serious professional lecturer-student relationship is effective for students' study". And

this top-down relationship “is not involved too much in individual problems, which would influence the supervisory process”. This opinion is also supported from the supervisors’ perspective, as *Responder 1B* shows. “Once I discuss academic issues with my students, I am serious immediately. The power emerges unconsciously and directly between my students and me. All my students trust me and respect me during the academic discussion process”. However, sustaining only a single professional lecturer-student types of relationship makes both supervisors and students feel uncomfortable and leads more easily to communication obstacles. “I felt very tired if I always play a role of lecturer in front of my students, and my students also felt that I was crazy” (*1F*). 2M’s learning experience makes him have similar feelings.

My supervisor sustained only a serious lecturer-student relationship with me. I was afraid of him, I talked with him carefully, I never argued with him. I knew that would bound my thinking ability, and it was not good for me to improve my communication ability.

Keeping a relationship that looks like friendship, similar to a kind of assistant relationship in the non-academic field, benefits to remain in a comfortable relationship, provides emotional support for students, makes communication without barriers between supervisors and students, and shapes students’ personality. For example, *Responder 3C* pointed out that

The relationships between my supervisor and his students are all like friends. He always invited us to have dinner at his home. And if he had any problems or he needed to have a favour from us, he would let us know. For example, when he moved house, all his students went straight to help him, because we, as his students, believed that providing help was our responsibility.

Supervisor 1E supports this view. “I have a harmonious private relationship with my students. We always have dinner together and joke like friends” (*1E*). A relationship that looks like friendship makes students feel that they have a closer relationship with supervisors. Keeping this relationship also benefits communication between supervisor and students, and “to motivate students to get into the swing of their academic work” (*3I*). However, there are some disadvantages, if supervisors cannot control appropriately this relationship. Some respondents found that a too close friendly relationship with students may lose supervisors’ power and authority. In addition, the relationship that looks like friendship is hard to sustain for supervisors with every student, because this relationship is related to students’ and supervisors’ working styles and their personalities. For example,

This relationship like friendship is hard to keep as the age distance increases between supervisor and student...When a supervisor's age is much bigger than his students' age, the majesty from supervisor is shown automatically for his students. Even if this supervisor wants to have a close relationship with his students, students may still keep distance with their supervisor (3D).

A peer-colleague relationship provides free and relaxed academic atmosphere, which benefits students to reduce communication obstacles with supervisors, and improves their ability to become competent in their future academic positions. As a student responder said "This relationship by my supervisor provided a relatively relaxed learning environment for me. And it also benefits to improve quickly my skills following other lecturers' help" (3D). Supervisor 11 agreed; he described his experience, when he studied as a doctoral student.

My supervisor and staff, who worked in my department, gave me wedding gifts when I married, and they ran a farewell party, when I studied as a PhD student. Keeping a peer-colleague relationship helped me learn how academics work. This relationship benefits me to work independently when I start my academic career. So I keep this relationship as an associate relationship with my doctoral students.

Peer-colleague relationship is more suitable for the mature students, who worked several years as university lecturers. Responder 3B, who was an Associate Professor in a Jiangxi University before she started her PhD, supported strongly this opinion. She indicated that "Most doctoral candidates are mature. They have their own values. At this stage, the most comfortable relationship among people is peer relationship like colleagues". However, this relationship is limited from Chinese culture influence relating to age distance, as 2M describes. "When I see my supervisor, who is an old person, I unconsciously feel a power and distance from him and it is hard to start the peer discussion". 2N also mentioned that "due to the influence from Chinese culture, it is hard to build up the peer-colleague relationship with supervisors who had big age distance with their students".

Similarly, the respondents indicated that with the increase of age distance between doctoral supervisors and students, a parental relationship emerged unconsciously, because of influences from traditional Chinese culture. For example, within the supervisors' perspective, "the age of most my students is similar to my children. I like to pass to them my experience both in the academic area and in the life field, because I have unconsciously a feeling that I am one of their family members" (1A). Most young doctoral

students and graduates also expect to have parental relationship with their supervisors, as shown by student's *Responder 3A* description. "Due to the influence of Confusion culture, which is that the traditional lecturer-student relationship is like a father-son relationship, the traditional parent-child relationship still needs to be advocated."

Finally, some responses regarded the purely work relationship or employment relationship as the ideal relationship. *Responder 2D* described what a work relationship looks like. "As a supervisor's employee, I had several chances to go out with my supervisor projects, and to join the social interaction with entrepreneurs and government officers, involved in my supervisor's projects, and who may benefit students' career development in the future". As Appendix 7-4 shows, the advantages of this relationship include enlarging networks and improving students' independent working ability. *Responder 2H* indicated that "the most important things for me was improvement of my research skills [during my PhD studying period]. So I believed that the pure work-relationship is enough to achieve this purpose". However, this relationship also can bring a negative influence on supervisory process, as *Responder 2M* thinks.

Many students called their supervisors bosses, and some supervisors called themselves bosses, because they needed to give themselves titles for striving for new funding from new projects and to effectively manage their projects. I do not think that is a good atmosphere to maintain academic thought. They should keep their minds on academic matters.

To sum up, the relationships between doctoral supervisors and students, which are regarded as important factors influencing the supervisory process, are complex. As Appendix 8 shows, although the data above showed that all respondents regarded the serious professional lecturer-student relationship as their fundamental supervision relationship, the majority of supervisors kept other relationships as subordinate relationships, which are expected by students and graduates. The main subordinate relationships include a relationship that is like friendship, peer-colleague relationship, parental relationship, and work relationship. The data reported that remaining in mixed relationships benefits to communicate comfortably between supervisors and students and makes the doctoral supervisory process more effective.

According to respondents from three groups, what relationships are used between supervisors and students, how many relationships are sustained, and how much the share

of these relationships are influenced by many factors, including students' traits, supervisors' features, the requirement change in students' different PhD stages, and age distance between supervisors and students.

For example, *Responder 2K* indicated "I felt this relationship is like a relationship of falling in love. The relationship varies, when the main bodies including supervisors and students change". *Responder 2E* provided another good example. She found that her supervisor remained in different relationships with different gender students. "My supervisor mainly sustained the serious professional lecturer-student relationship with female students. However, he remained the mixed relationships between professional lecturer-student relationship and relationship like friends with male students. For instance, he always had dinner and drinks with male students".

Furthermore, some supervisors emphasised that age distance influences the relationships with their students. Keeping peer-colleague relationship is more suitable for the students who have similar age with doctoral supervisors, or who have had work experiences as academics (*IC*, *IG* and *IH*). In addition, the relationship could also change depending on the varying stages of students' PhD progress, as *Responder IH* says (from a supervisor's perspective): "I expect to build good relationships with my doctoral students after they graduate. I will appreciate that, if students like to visit me, or we still have dinner party and holiday party together after they graduate".

Although many respondents, from among students, graduates and supervisors, suggested that doctoral supervisors play a dominant role for managing the relationship between supervisors and students, students need to recognise their role. For example, *2D* indicated that "in China, there is a clear boundary between supervisors and students. Students need to realize their student identity, which decides mainly what roles they play in supervision process".

Therefore, the above comments show that maintaining effective and comfortable relationships with students, via formal and informal activities, influences doctoral supervision positively. The next section presents discussion of the data relating to supervisor factors.

6.2 Supervisor factors / ideal supervisor characteristics

The data points out that there are two main traditional duties of Chinese supervisors. The two functions include the delivery of academic knowledge and skills, and cultivating people who have good characteristics. These two functions can be performed via three main characteristics from doctoral supervisors, which influence the doctoral supervisory process. As Table 6.2 shows, the four factors related to doctoral supervisors consist of *pinde* education, knowledge background, and abundant well-resourced academic resources and supervisors' experiences, and other comments related to supervisor. As the fourth factor related a small number of comments which are not very important, the following section will focus only on three main factors related to doctoral supervisors.

Table 6.2: Coded relating to supervisor factors

Themes	Coded	Frequency of comments	Numbers of responders
Supervisors factors	<i>Pinde</i> education	248	39
	Knowledge background	102	39
	Well-resourced and experienced supervisor	43	28
	Other comments related to supervisor	12	8
	TOTAL	405	39

Source: Developed for this research

In terms of respondents' discussion, doctoral supervisors played a vital role across the whole PhD supervisory process, and they consciously or unconsciously influenced students significantly in both academic and life areas. Supervisor *IK* reported that "the quality of a supervisor can mainly determine the quality of students' theses and the class of his/ her graduates. A supervisor is charged with 60 percent duty and students undertake 40 percent responsibility". Responder *ID* further explained this issue:

It is not a process of students' graduation; however it is a process which supervisors and students graduate together, because a supervisor plays significant roles and support to solve problems for students in each stage during students' doctoral process, such as courses selection, topic selection, monitoring program, organizing formal and informal activities, dealing with interpersonal relationships with people involved in students' study, and preparing publications and thesis submitting.

Graduate *3F* stated firmly: "To be honest, I learned the majority of my academic knowledge and skills, academic attitudes, and even something about the *pinde* characteristics of a 'good' or 'exemplary person' from my supervisor".

The results regarding on *pinde* education have been showed in Section 5.2. Therefore, the following section will focuses on the other two factors: knowledge backgrounds, and well-resourced and experienced supervisor.

6.2.1 Knowledge backgrounds

All respondents reported that similar knowledge background between supervisors' interest and expert knowledge fields, and students' research topics influence doctoral supervisory process positively.

From the doctoral students' and graduates' perspectives, the majority of respondents prefer to follow supervisors who have similarity between supervisors' macro knowledge background, including their interest in topic fields and research methodology, and students' research projects. For example, *Student 2L* indicated that "the doctoral supervisor is the first formal assistant or helper to enlighten students in academic study. Similarity of knowledge background benefits students to start their PhD". *Student 2O* agreed: he also stated that "supervisors need to guard the pass on the macro-direction of students' research both in topic selection and in research method choice. Supervisors cannot be a standard gatekeeper, without similar knowledge background matched with students' research". *Graduate 3C* also supported this opinion: "my supervisor and I were both from engineering backgrounds...So my supervisor could understand more the challenges for me and my ways of thinking in my whole PhD process, because we had similar knowledge background and study experiences".

From the supervisors' perspective, all respondents indicated that they only select doctoral students whose research topics are similar to the supervisors' interests research fields, because supervisors' knowledge background and academic ability are a necessary guarantee to support students to complete doctoral theses. "Supervisors should have strong knowledge background which matches students' topics, otherwise they would have not enough power to support students independently" (*1J*). Similarly, Responder *1C* pointed out that "I do not consider students whose research topics are not relevant to mine, because I have no ability [academic knowledge background] to provide them with the necessary help and I have no confidence to guide them to graduate in an unfamiliar field".

Although most respondents expected that students have the similar research topic to their supervisors' field, the similar extent of knowledge background is not too necessary, because of two possible reasons, which respondents provided. Firstly, "supervisors usually have broad knowledge in their disciplines and abundant research experience and ability, which are enough to provide necessary supports to assist students who studied in the same discipline to complete doctoral theses" (*Supervisor 1D*). Respondents from *Graduate 3F*, *Students 3F* and *3H* have similar ideas to *Supervisor 1D*. Secondly, from the supervisors' perspective, "the supervisor should focus on being a gatekeeper to master macro-direction students' projects within academic perspective in Management field, instead of doing and checking in each detail for these projects" (*1C*). *Responder 1E* has a similar opinion to *1C*. He indicated "I am not expert in any one of research methods: however it does not prevent me from guiding my students effectively, because supervisors could not be good at every aspect related to students' projects". Therefore, the broadly similar, instead of the very similar, research background seems necessary to contribute to an effective doctoral supervisory process.

6.2.2 Well-resourced and experienced supervisor

Fifteen respondents from the three group interviews stated that well-resourced and experienced supervisors benefit the doctoral supervisory process. Students and graduate respondents indicated that they preferred following well-resourced and experienced supervisors, who were also likely to share their resources with their students, even if these supervisors were very busy. The possible reason for this issue in students' and graduates' minds is that "the good resources are controlled by a few academics who normally have the title of Professors" (*2B*). A supervisor "needs to be well-resourced, because most progress of students might link with the supports from supervisors, who need to use their resources" (*2B*). Similar to the respondents from students and graduates, *Supervisor 1A* indicated that "the more resources supervisors have, the more opportunities, such as the opportunities of job recommendation and the chances of participating in academic activities, supervisors can provide for students".

The data reported that supervisors' resources include academic resources, social resources and administrative resources. Supervisors' good academic resources benefit to provide more opportunities for students to participate in more supervisors' projects (*2P*)

and publish more papers in good journals (2B). Graduate 3D supported these opinions. “A supervisor without enough resources, such as good projects, does not satisfy a requirement of a standard doctoral supervisor. Students need to improve their abilities, by participating in a supervisor’s projects, which are regarded as a supervisor’s basic resource”.

Some respondents suggested that supervisors’ good social resources supplied better help in the process of doing projects and job seeking for students. *Supervisor 1B* indicated “most well-resourced supervisors introduce people who worked in students’ research fields. These networks may bring benefits for students’ topic selection and data collection”. Some comments (1A, 1B, 2B 2D, 2L, 2O, 2P, 3D and 3I) also discussed that good social resources from supervisor would provide a big help for students’ future careers. 2P emphasised that “supervisors, as students’ referees, may use their complex and special social relationships to introduce their students to certain departments. The more good social resources and reputation supervisors have, the easier their students find good jobs”. 2D agreed with this view, and he indicated that “once supervisors retired, their influences would reduce sharply. They could only provide limited service to students’ future careers”.

Supervisors’ administrative resources could also bring more benefits for students, including students’ internship chances and gaining the opportunities of funding (2I). On the contrary, “if a supervisor has no administrative positions in his university, he may have no funding to support doctoral candidates” (3J).

In addition, from the supervisor’ perspective²⁷, supervisor’s supervision experience is an importance factor to influence the supervisory process. *Respondents 1A* and *1J* suggested that one of requirements of being doctoral supervisor is having experiences of supervising at least the whole process of a postgraduate”. A possible reason for this idea is that supervisors need to accumulate effective communication experiences with students, as

²⁷ The respondents from graduates and students do not mention this issue, maybe because all doctoral supervisors already had many supervision experiences before they became doctoral supervisors. In this Chinese university, one of the requirements of being a doctoral supervisor is having experiences of supervising at least a whole process of a postgraduate.

responder 1C suggested. “Supervisors, who have abundant supervision experiences, are good at dealing with complex relationships, and are expert in using appropriate formal and informal communication approaches, even in daily dialogue, to consciously help students to improve academic knowledge and integrate ability”. However, “lacking communication experiences with students may lead to the negative influences such as a serious mistake, which is derived from inappropriate communication and which may break the relationship with students finally” (*IG*).

In summary, doctoral supervisors play significant roles both as knowledge deliverers and as professional talent breeders to influence the whole doctoral supervisory process. The above comments showed three main factors linked how doctoral supervisors influence the doctoral supervisory process. The three main factors are *pinde* education, supervisors’ knowledge backgrounds, and well-resourced and experienced supervisors. The factors relating to *pinde* characteristics for students consists of six main elements: responsibility, caring for students, rigor, toleration or broad mindedness, and other characteristics, such as diligence, not being too materialistic, charity, sharing resources, justice, and modesty. The data analysis results involved in student factors are presented in next section.

6.3 Student factors

The data below suggests that student factors influence doctoral supervision. As Table 6.3 shows, according to the frequency of comments in descending order, the student factors include three sections: motivations for doing their PhD, a similarity between students’ prior knowledge and their current research fields, and students’ relevant prior work experience.

Table 6.3: Codes relating to student factors

Themes	Coded	Frequency of comments	Numbers of respondents
Student factors	Motivation	158	37
	Prior knowledge	56	32
	Prior work experience	55	26
	TOTAL	269	39

Source: Developed for this research

6.3.1 Motivation

The purpose of doing a PhD, which is regarded as students' motivations, is an important factor to influence doctoral students' supervision process and also to motivate students to produce the higher level quality outcomes. In terms of respondents' discussion from the three group interviews, there are five motivation factors, which influence the doctoral supervisory process. These motivation factors are: relevant factors linked with careers; improvement in personal knowledge and skills; relevant factors which are influenced by Chinese government policies, such as *huji* policy; doctoral candidates' interests, and other motivations involved in expanding networks; going aboard via getting help from doing a PhD; and making family members' or their own expectations come true.

Firstly, most comments on students' motivations for doing their PhD link with doctoral candidates' careers, such as finding an academic job after they graduate; finding a good position in a non-academic job, because obtaining a title of PhD is a good stepping-stone for future careers; and satisfying requirements of their current positions or benefits of promotions.

For example, reflecting on academic career expectations, *Student 2M* emphasised that "A doctor degree is regarded as a necessary qualification to start my academic career in a current Chinese university". There are several reasons to motivate some candidates to be academic educators in the future. For *Graduate 3K*, her individual purpose for doing a PhD is only finding a job as a university lecturer. She believed that a university lecturer's job would be stable. Stability of employment is very suitable to her for three advantages: flexible job time, having two long holidays each year, and few work pressures. *Responder 2E* agreed with *3K*'s views and she stated her interested in an academic job rather than another kind of job. One reason is "I enjoy the process of research", and the other reason is that

An academic job is more convenient for me, because of the flexible time. Then it is better for me to balance my work and life, such as taking care of my family or doing something I wanted... however, if I work in the public service, I need to spend lots of after hours time to maintain the relationships with my colleagues.

Within the supervisors' perspective, the data also suggested that "a student motivation which is seeking an academic job in the future contributes to the supervisory process."

Responder 1A mentions: “students, who expect to become academics in the future, have high enthusiasm to learn during their PhD process”.

The data reported that some students’ purpose for doing a PhD is finding a good non-academic job, such as in the public service, which also influences the doctoral supervisory process. Many respondents from all three groups mentioned that obtaining a title of PhD is a good stepping-stone for future careers. There are two important reasons why PhD degrees are important in finding jobs. One reason for doing a doctoral degree is that can reduce the pressure of seeking an appropriate job. For example, *Graduate 3F* explained “I did my PhD for two reasons. One is that it can reduce pressures of finding a job within ‘the certain period’²⁸, [after I graduated with my master degree]”. *Student 2L* agreed with this point and said “At the end stage of doing my master degree, I was only focusing on completing my thesis and then I had not enough time to find a job. So I started to do my PhD to reduce the pressure on job seeking”. The other reason is that a title of doctor is a stepping-stone, which is a benefit for finding a good job, as *Graduate 3F* said “I hope that I can find a good platform for preparing to seek a good job in the future”. *Student 2D* also emphasised that “Gaining a doctoral degree is like getting an entrance ticket with a good seat for my future job”. Some respondents from the supervisors group pointed out that if the purpose of doing a PhD is reducing employment pressure, it can influence doctoral supervisory process negatively, as *Responder 1K* indicated:

Reducing employment pressure within a certain time is the real reason that prompts some students to start their PhD in China. Research institutes are regarded as refuges to these graduates who are not interested in research, and who could not concentrate on doing their research during the whole PhD process.

Several comments indicated that one of the purposes for doing a PhD is for job promotion or satisfaction of current job requirements, which can improve students’ learning enthusiasm and this motivation influences students’ supervisory process positively. For example, *Graduate 3E* emphasised that her desire for doing PhD was derived from work-needs. She pointed out that “I felt that my knowledge was not sufficient for my current

²⁸ As mentioned in Chapter 2, Section 2.1.5, Chinese full-time students need to graduate within the ‘certain period’. Graduates should pay much attention to complete a series of things, such as signing the ‘tripartite agreement’ (三方协议), getting *paiqianzheng* (派遣证) and also ensuring a ‘cadre status’ (干部身份) within six months.

job in the Macro-management department. Therefore, I am keen to systematically learn in this area and then start my PhD”. *Respondents 2F* and *3C* also faced a similar situation; they emphasised that a regulation stipulated that young university lecturers must have a doctoral degree. So this regulation motivates them to do their PhD in their learning process.

Secondly, the data from all three groups indicated that a motivation for doing PhD for doctoral candidates is improving general *suzhi*²⁹. For example, *Responder 3H*, as a qualified university lecturer, needed to improve his professional knowledge and general academic abilities. The original purpose of doing a PhD motivated *3H* to study hard in his whole study process. This opinion is very similar to *Responder 3F*’s. She further explained “after I graduated and obtained my master degree, I felt that I am not good enough in all sorts of *suzhi*, especially in my academic fields. I really wanted to make myself better through training for the PhD process”. According to the respondents reported, the general *suzhi* are divided into two aspects by respondents: in professional knowledge and academic ability, and in shaping students’ personality. Data from respondents shows that improving professional knowledge includes Macro theoretical knowledge in management, Micro knowledge relating to research topic, and research methodology. Improving general academic and working abilities involves communication, creative, time management, organisation, Macro-control, finding problems, and academic writing.

Thirdly, *huji* policy³⁰, which is emphasised by all three different groups, stimulates some students to commence their PhD journey and influences them in the supervisory process. The data shows if people obtain a doctoral degree in Beijing, they will get more chance to obtain Beijing’s *huji* and then immigrate to Beijing. So securing Beijing becomes a surface reason to stimulate people to commence and complete their doctoral degree. There are several reasons to encourage a move to Beijing, and also to gain Beijing’s *huji*. The first reason is that obtaining Beijing’s *huji* is helpful for people to find good jobs in Beijing, as a graduate *Responder 3A* pointed out:

²⁹ *Suzhi* is a term referring to individual’ quality, and this term is reviewed and explained in Introduction (Chapter 1).

³⁰ This policy has been introduced in Chapter 2. This is an administration policy for the Chinese population.

The most direct reason of moving to Beijing is derived from employment issues. Finding a job became two-way choice ³¹ since 2003... At that time, a formal job transfer was very difficult without a huji in the city that you wanted to move to. If I did not do my PhD, I could not have any chance to migrate to Beijing.

A student *Responder 2D* supported this view: “if I wanted to find a good and stable job in Beijing, such as working in the public service. I had no other choice, except doing a PhD”. Working in the public service in Beijing is regarded as a good job, because of three reasons: respectful job, good allowances, and welfare, such as gaining the right of allocation of a good apartment in a good location with a cheap price and not too many afterhours courtesy duties (*2D*, *2E*, *2O*, and *2P*). The second reason for *Respondents 1F*, *1J*, *2A*, *2B*, *2P* and *3A* is that Beijing is an attractive city which has a freer living style, as *Responder 3A* said: “Beijing is a society full of freedom...This living environment [in Beijing] makes people more independent and freer for sure”. The third reason for this action, for *Responder 3A* is that immigration to Beijing is a big change in his ‘cadre status’ from farmer to cadre. Although most respondents pointed out that the purpose of doing PhD to migrate to Beijing permanently motivated students to work hard in the supervisory process, *Responder 1G* provided an opposite view: “some students expected to...gain Beijing *huji* through gaining PhD degrees or supervisors’ supports. I felt that these purposes do not benefit students to study with peace of mind”.

Fourthly, all three groups of respondents indicated that the motivations related to doctoral candidates’ interests contribute to the supervisory process. Students’ positive interests include interest in their current disciplines or in their research topic, interest in the doctoral learning process, and enjoyment in learning at a higher ranked university within supervision by famous doctoral supervisors. *Responder 1A* explained the reason of positively influencing supervisory process is that “students prefer to put their long-term efforts on their fields of interest”.

Finally, other motivation factors, which influence doctoral supervisory process by the respondents from students, graduates and supervisors, involved expanding individual

³¹ In China, before 2003, graduates should follow distribution by government to find a job. After 2003, graduates could find a job via two-way choice from both employers and graduates.

social networks, achieving a doctoral degree, and making family members' expectation come true, which is influenced by Chinese culture.

Therefore, during discussion, respondents comment that doctoral students' motivation could influence doctoral supervision (See Appendix 6-4). The majority of respondents expected the motivations (non mutually exclusive) of students doing PhD in three aspects which would influence doctoral supervision positively. The three positive motivation factors are:

- interest in research topic, or
- improvement of professional knowledge and skills, or
- requirement of career development as an academic or satisfying the current position's requirement

Some responders, especially supervisors, provide reasonable reasons for this issue. "When the only purposes of doing PhD are undertaking student interesting topics or improving students' individual knowledge and skills, students can persist to ignore other negative temptations and prefer putting their long-term efforts on their research topics" (IG). *Responder 1A*: "students, who expect to become academics in the future, have high enthusiasm to learn during their PhD process".

On the contrary, the respondents suggest that some reasons for doing a PhD, such as reducing employment pressure, gaining Beijing *huj*i, and other motivation factors such as making family members' expectations come true, may influence doctoral supervision negatively. For example, "some students expected to find out a good non-academic job or gain Beijing *huj*i through gaining PhD degrees or supervisors' supports. I felt that these purposes do not benefit students to study with peace of mind" (IG). Similarly, *Responder 1K* indicated that:

Reducing employment pressure within a certain time is a real reason that prompts some students to start their PhD in China. Research institutes are regarded as refuges for these graduates who are not interested in research, and who could not concentrate on doing their research during the whole PhD process.

6.3.2 Prior work experience

Some respondents from all three groups indicated that students' relevant work experience contributes to students' supervisory process, particularly in the stages of topic selection and data collection and the students' final learning outcomes.

For example, *Graduate 3B*, speaking of her work experience contributing to the doctoral supervisory process, believed "as a doctoral candidate, it would serve you better if you have already had some work experience". A student *Responder 2J*, who is a trainee manager while he is a PhD candidate, agreed with this opinion. He said that "I was interested in some issues, derived from the popular problems in my current work experience, and then I started my topic in this field". He also emphasised that "it is convenient to collect data in my working area". Some respondents (*1D* and *1E*) within the supervisors' perspective strongly suggested students select topics which are derived from their working area for two reasons. One reason is that these topics have strong practical contribution which improves students' leaning enthusiasm. The other reason is that this way may help students to collect data.

In addition, some respondents indicated that students' prior similar working experience contributed to their doctoral outcomes. For instance, a supervisor, who is familiar to *Responder 3B*, further mentioned that similar working experience benefits students' publications. "Supervising the students, who are also CEOs, is a great job. This is simply a success case and the publication outcome is wonderful". The reason for this result is "what they [these students] did were enterprise-related dissertations that were more down to earth", and "they can solve some real, tangible problems". So their papers are more easily published in top journals.

The lack of relevant practical experience is a disadvantage in doing PhD for *Graduate 3B*. "For someone without any practical experience, pursuing a doctoral degree is like building a foundation-less building on another foundation-less building, which is not good for students". *3B* felt that most of students' efforts are a waste of time learning many impractical things.

6.3.3 Students' prior knowledge background

Most respondents from the three different groups reported that a similarity between students' prior knowledge background and their current study fields can influence doctoral supervisory process positively, as the data below suggests (The typical comments on students' prior knowledge background outlines in Appendix 7-5).

All three groups' respondents indicated that candidates who keep studying in the same discipline from bachelor to doctoral degree have considerable competence for their doctoral candidate role. That is because these students usually have systematic theoretical knowledge, and fundamental and solid professional background related to their research. Therefore, these students have more possibility to complete their PhD theses smoothly, especially in the process of topic selection, literature review, data analysis, and shaping the thinking way as an academic in the Management discipline.

On the contrary, students who have no relevant knowledge face more difficulties doing their PhD. All respondents from both graduates and current PhD candidates, who had no Management education background when they did their PhD, emphasised that lack of Management background makes the completion of their PhD thesis difficult, which shows especially in the early stage of PhD process, such as the processes of reviewing literature and selecting a research topic. The respondents from the supervisors' group also agreed with this view. For example, *Supervisor 1D* commented that "many students without relevant knowledge background delay their graduation, because they needed to spend more time to select a research topic". In addition, some students emphasised that having no Management education background created many difficulties in finding their doctoral supervisors. *Supervisor 1K* provided a reasonable explanation: "I only select as my doctoral student people who have a similar education background, because the doctoral training process is like a production-line. The lower level raw materials I use, the more opportunities of defective products emerged".

This section discussed data related to student factors in terms of 39 interviews. The students' factors have involved three main aspects: the motivations for doing their PhDs, students' prior knowledge, and students' prior work experiences. The data also indicated

that these three factors influenced the doctoral supervisory process directly. Discussion related to the data of other factors in academic environment follows in the next section.

6.4 Academic environment

The data below suggests that three main groups can provide the academic environment, which influences doctoral supervisory process and helps students to complete their doctoral theses. As Table 6.4 shows, according to the importance of influence in descending order, the three groups include peers, lecturers other than the students' supervisor, and others, such as family members, friends, librarians, editors, and administrations staff.

Table 6.4: Coded relating to support service

Themes	Coded	Frequency of comments	Number of respondents	Respondents
Support service	Peers	64	31	1A, 1C, 1D, 1E, 1F, 1H, 1I, 1J, 1K 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2L, 2M, 2N, 2O, 2P, 3A, 3B, 3C, 3D, 3F, 3H, 3I, 3J, 3K, 3L
	Other lecturers	20	16	1H, 1I, 1J, 2A, 2C, 2I, 2J, 2K, 2M, 2O, 3D, 3E, 3F, 3G, 3J, 3K
	Other members	13	9	1I, 1J, 2B, 2F, 2G, 2H, 3A, 3F, 3L,
	TOTAL	97	36	1A, 1C, 1D, 1E, 1F, 1H, 1I, 1J, 1K, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2L, 2M, 2N, 2O, 2P, 3A, 3B, 3C, 3D, 3F, 3G, 3H, 3I, 3J, 3K, 3L

Source: Developed for this research

6.4.1 Peers

Thirty-seven out of 39 respondents indicated that peers played important roles for doctoral candidates. In this research, peers are divided into two groups, *non-tongmen*, who are supervised by different supervisors, and *tongmen*, who are guided by the same supervisor.

The respondents from all three group interviews pointed out that although a fundamental relationship among peers was based on collaborative learning, support from peers did not only focus on academic areas. Peers are also necessary groups who provide emotional support, share information, support to improve general abilities, and enlarge the networks for doctoral students. As *Responder 3L* said that "I could not graduate and gain my doctoral degree without help from my peers. Peers provided me academic and emotional

support”. Supervisors also support these points of view. For example, *Responder 1A* mentioned that “when I studied as a PhD student, my peers provided me strong emotional support and academic help. We studied and had lunch together and these things motivated me to work hard every day”. He further emphasised that peers benefit to build up the long-term academic networks. “Most of my peers, who I have known since I was a PhD student, have become famous academics now. We still keep really good relationships and we get together and share academic experiences regularly”.

Although most candidates gain help from both *non-tongmen* and *tongmen*, such as gaining projects suggestions and sharing information, the respondents from students’ and graduates’ interviewees found that the help from two groups has differences, as Appendix 7-6 outlines. The help from *non-tongmen* focuses more on the rough suggestion on their project, enlarging professional knowledge in both the same discipline field and in different disciplines, providing emotional support and sharing public and general information. On the contrary, the supports from *tongmen* focus more on the detailed and private guidance regarding thesis and publication, improving their academic ability, sharing implied and detailed information, and building up close and long-term networks for doctoral students.

Some respondents gave possible reasons why these differences occurred in China. The first reason is derived from supervisors’ influence, as *Responder 2P* said:

Most Chinese supervisors pay much attention to the tribe status relationship. That is why tongmen usually provide stronger help to each other following their supervisor’s suggestions. These actions can make the tribe become stronger and develop soon. Supervisors are not necessary to provide all the detailed information to the students who are not supervised. In fact, I do not think many supervisors provide much detailed suggestion and help to students supervised by other supervisors.

Responder 3H is another good example to emphasise that the extent of sharing materials with *tongmen* is much more than with others, because of the influence from supervisors.

Even if most peers may want to share information with each other, I think sharing to the extent I have talked about is not normal outside of the tongmen situation. My tongmen could share so much with me, because my supervisor suggested that he pass most of his thesis outcomes and also relevant materials to me. I think this suggestion from the supervisor is an important reason why my tongmen would provide this help for me.

Furthermore, the data reported that Chinese supervisors usually let *tongmen* get together as a team to participate in supervisor projects. Then *tongmen* would learn from each other during the periods of doing projects, as *Responder 3C* stated that “I learned lots from my *tongmen*, when we got together to complete supervisor projects. The gains derived from my *tongmen* are knowledge, thinking abilities, an ability of controlling project progress and procedures”.

The other reason for the different support from the two groups is derived from students’ factors. Several comments indicated that the peers, especially students who are supervised by different supervisors, enjoyed more sharing happy and painful things both in their academic area and in their life. This helped them to reduce study pressures and also increase their confidence during study processes. *Responders 3I* emphasised that “peers, who were supervised by different supervisors, might easily get together and reduce pressures”, because “two doctoral candidates under the same supervisor had a strong competitive relationship, which increased study pressures for them”.

The data indicated that most respondents recognised the importance of peers. Therefore, from the doctoral supervisors’ perspective, that they put great efforts to provide the opportunities to make their students know each other, and create an atmosphere to help them build up close relationships. For example, most Chinese supervisors organised informal social activities to increase the *tongmen*’s communication opportunities. The informal social activities include holiday parties (*1C*, *1D*, *1E* and *1H*), supervisors’ birthday party (*Responder 1E*), and dining together (*1C*, *1H*, *1I* and *1K*).

6.4.2 Lecturers other than the students’ supervisor

Sixteen respondents from three group interviews indicated that they gained benefits from other lecturers including lecturers and experts who worked in similar fields, rather than their own supervisor during the PhD supervisory process. The data pointed out that these lecturers influence them in increasing professional knowledge, in improving academic ability, and in students’ working styles in the future by teaching relevant courses, offering personal suggestions on candidates’ research projects, and also supporting candidates to participate in supervisor projects.

For example, *Responder 2C* mentioned that “the other lecturers could help me to enlarge my professional knowledge by teaching relevant courses, and communicating with me after their course”. Similar to *2C*, *Respondents 2A*, *3K* and *3I* emphasised that understanding the knowledge of methodology, from other lecturers, was very helpful for their research. *Responder 1I*, as a supervisor, also supported this view. He stated that when he studied as a PhD student, “I was keen to communicate with lecturers other than my supervisor. They gave me many suggestions related to topic selection, thesis structure. They influenced me a lot both on increasing knowledge and on improving my thesis quality”.

Furthermore, lecturers’ experiences, such as sharing projects’ experiences with students (*1I*, *1J*, *2K*, *2M*, *3D*, *3J*, and *3G*), and sharing writing skills via analysing good articles’ structures, would also benefit students to improve their writing skills for their theses and publications (*2A*).

In addition, lecturers’ academic vitality and working styles also unconsciously influenced doctoral candidates. *Responder 3G* said:

Some lecturers in my university run their own company related to their disciplines.....I knew a lecturer who worked in this way. In my opinion, this lecturer had an adventurous personality. So he was very successful both as an academic and as a manager for his own company...I felt that these lecturers, who had many experiences both in work and in life, would influence me a lot.

6.4.3 Other members: family members, friends, librarians, and administration staff

As Table 6.5 shows, some respondents reported that people including family members, friends, librarians, editors, and administration staff provide much help for doctoral students.

Family members and friends provide doctoral students more with emotional support, as *Responder 2H* suggested. “The process of writing my PhD thesis is a depressed and painful process. Without having ongoing encouragement from my partner, I could not make progress for my thesis”. *Responder 3A* agreed and he further indicated that “my family members also provided me enough financial assistance to help me keep studying

without financial burden”. The respondents from all three groups all indicated that students’ friends organised some activities, such as climbing, and riding. These activities could help them to relax, and this relaxation helped them to have abundant energy for further study.

Table 6.5: Codes related to other members

Factors related to other members	Frequency of comments	Respondents
Family members	4	1I, 1J, 2G, 2H
Friends	2	2H, 1J
Librarians	3	2B, 2F, 3F
Editors	3	1J, 2B, 3F
Administration staff	3 (2 comment same to editors)	1I, 2B, 3F
Total	13	9

Source: Developed for this research

Six respondents commented that librarians, editors and administration staff offered the professional searching skills and services helping students to find out relevant data or information. For example, librarians provided candidates with valuable help, when they searched relevant literature for their theses (2B and 3F). *Responder 1J*, from a supervisor’s perspective, suggested that “accurate searching literature ability is important for PhD candidates. I normally suggest all my new PhD students learn relevant skills from professional experts, such as librarians”. Furthermore, editors are regarded as a professional group offering professional help to improve students’ academic writing ability. *Respondents 2B* and *3F* gained many benefits from editors when they were doctoral students. *Responder 1J*, a doctoral supervisor, also commented that professional editors could provide students with professional writing training. “Academic writing is different from the other writings. Students need to have professional trainings on their academic writing during their PhD process, and professional editors can provide help in this area”. In addition, several respondents from students, graduates and supervisors’ groups emphasised that the administration staff normally offered students valuable information, which benefits new students to fit quickly into the new unfamiliar living and studying environment and then start their PhD fast.

This section showed detailed results of the data relevant to three main support services factors influencing doctoral supervisory process. The three main support services include

peers; lecturers other than the students' supervisors; and others, such as family members, friends, librarians, editors, and administration staff.

6.5 Conclusion

This chapter presented first data analysis of how the cultural custom and policy practice of China influence the responsibility of Chinese doctoral supervisors, which involved two elements: the relationship between doctoral supervisors and students (Section 6.1) and the factors related to doctoral supervisors (Section 6.2). This chapter also showed the data on how the cultural custom and policy practice of China motivates students to undertake and continue their PhD (Section 6.3). The data related to other factors involving in academic environment, such as peers, lecturers, family members was discussed in Section 6.4.

To sum up, according to the frequency of comments on data analysis in descending order, the refined elements include: supervisorial practices; factors related to supervisors including the relationships between supervisors and students, and supervisor characteristics; factors related to students; and other factors in the academic environment. The next chapter will focus on presenting the discussion.

Chapter 7: **Discussion**

Chapter 5 and Chapter 6 discussed the detailed results of data analysis. The researcher adopted Nvivo software revision 10 to sort of the data collected from three groups' interviewees: doctoral students, doctoral graduates particularly postdoctoral fellows, and doctoral supervisors who worked or studied in the Management field in a leading Chinese university. The analysis results were displayed in five components through single-case analysis in Chapters 5 and 6. The five components are supervisorial practices involving project guiding (group education) and *pinde* education; the relationship between supervisors and students; supervisor characteristics; student factors; and other factors in the academic environment.

Based on the findings in Chapters 5 and 6, this chapter focuses on answering the research problem:

How does the cultural custom and policy practice of China influence doctoral supervision in the Management discipline in China?

Then three sub-questions, which involve three principle parts: doctoral supervisors (Question 1), the part linking with between supervisors and students, and among the members in the academic environment (Question 2), and doctoral candidates (Question 3) are provided to answer this research problems. The three research sub-questions are as follows in the Management discipline in the Chinese context as Figure 7.1 shows.

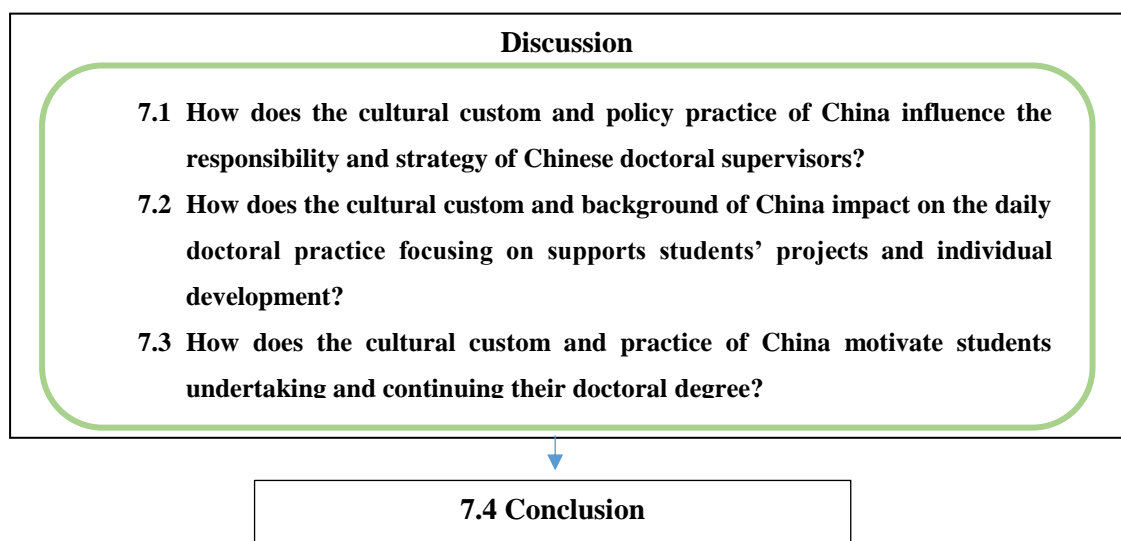


Figure 7.1: Structure of Chapter 6

7.1 How does the cultural custom and policy practice of China influence the responsibility and strategy of Chinese doctoral supervisors?

In the light of the findings on doctoral supervisors, based on 405 comments from 39 interviewees shown in Chapter 6, doctoral supervisors play an important and vital role across the whole doctoral supervisory process. Supervisors' working and personal styles consciously or unconsciously impact their candidates. The results from this study confirm the importance of doctoral supervisors, particularly in supporting projects such as influencing doctoral students' timely completion and outcomes which have been recognised by some scholars (Agu & Odimegwu 2014; Halse 2011; Ismail, HM, Majid & Ismail 2013).

Based on the important role of doctoral supervisors during the whole doctoral supervision process, two following sub-questions were developed. These are:

- How does the cultural custom and policy practice of China influence the responsibility of doctoral supervisors?
- How does the cultural custom and policy practice of China impact on the doctoral supervisors' strategy to train their candidates?

7.1.1 How does the cultural custom and policy practice of China influence the responsibility of doctoral supervisors in the Management discipline in China?

As the representative of the academic institution in front of the doctoral candidate, doctoral supervisors' responsibilities are different to other countries. For example, in Germany and the UK, most senior scientists assume the responsibility for doctoral supervision (Buttery, Richter & Filho 2005). Some institutions expect that supervisors should be in charge of many things, such as seeking teaching and practicing chances, designing training approaches, monitoring candidates' progress, and applying for funding, for their candidates (Dann 2008; Emilson & Johnsson 2007; Green, DH 2008; Park 2005).

As discussed in Chapter 6, Chinese doctoral supervisors have two main traditional duties:

- delivering academic knowledge and skills, and
- cultivating people.

The findings seem to be consistent with the results of Western studies that found doctoral supervisors generally have two main essential responsibilities: supporting the students' research projects (Collins 2015; Ismail, HM, Majid & Ismail 2013; Taylor, S & Beasley 2005), and supporting the candidates (Collins 2015; Taylor, S & Beasley 2005). However, based on the data showed in Chapter 6, the meanings are different between the cultivation of people from my data and supporting the candidates from Western literature. The difference will be further explained in the following Section.

Duty 1: Delivering academic knowledge and skills

As data analysis chapters showed, in order to achieve the target of delivery of academic knowledge and support of their students' projects, Chinese supervisors who are regarded as effective executive officers, need have two main features. The first foundational feature is that supervisors as discipline experts should master the knowledge background and academic skills in their disciplines. All interviewees were concerned that supervisors are the necessary formal assistants and guarantees to complete their projects.

In addition, Chapters 5 and 6 showed that only the One Supervisor Policy is used during the whole doctoral supervision in this research. Reviewing the development of doctoral education in Western countries, the traditional supervision paradigm (one-to-one basis model) has been substituted gradually by the dual supervisors or the Panel supervision (Cullen et al., 1994). The advantages are revealed by some research (Cullen et al. 1994; Green, P & Bowden 2012; McGagh et al. 2016). However, in my research I found only the One Supervisor Policy was used, and this is consistent with the investigations on the relationships between doctoral supervisors and students that show One Supervisor Policy is mainly used in the doctoral training in most universities in China (China Academic Degree and Graduate Education Information 2017; Xu, R 2013). Xu (2013) pointed out the advantage of the One Supervisor Policy is to make the supervisors clearer on their responsibility and role.

That means that the doctoral supervisors play the more important role as the knowledge expert, compared with supervision which has two or more supervisors. As the only main effective and successful guider, supporter and gatekeeper, doctoral candidates expected their supervisors to have the broad knowledge background and academic ability, which matched candidates' projects (Boehe 2016; Kehm 2008; Li, MS 2016).

Many previous literature on the supervisors' duties in Western contexts supports the finding in this research that supervisors' knowledge background and academic ability are the foundation of supporting candidates' projects, and supervisors' knowledge and academic ability impact on the whole doctoral supervision process and candidates' outcomes. Collins (2015) and McCallin and Nayar (2012) identified that one characterization of a good supervisor is knowledge and experience. Supervisors, as the knowledge experts in their disciplines, acted as the knowledge and research skills' bank for their students, especially in the early supervision stage (Frischer & Larsson 2000; Wegener & Tanggaard 2013). Collin (2015) further emphasised that good supervisors should have similar research-orientation with their candidates and the supervisors should be the experts in their academic areas. Benmore (2016) in his research gave a good explanation, which is derived from a supervisor interviewee:

The student has to trust you as an expert... they are relying on your expertise to guide them to where they want to be... you have to demonstrate that they are quite right to place their trust in you through your action across the relationship (Benmore 2016, p. 1258).

Supervisors need to play different roles, such as producer, supporter, monitor and mentor, for making sure candidates get their theses done (Collins 2015; James 2017; Vilkinas 2002, 2008). Therefore, mastering the relevant research knowledge and basic research skills are the recognised basis for supporting candidates to complete their projects.

Secondly, experiences and good resources (43 comments from 28 interviewees in the discussion on this issue in Chapter 6) are other features which doctoral supervisors should have and which help supervisors provide the projects' support. This finding is supported by Gu's previous studies. Gu et al (2010) indicated that candidates following the experienced and well resourced supervisors benefit to obtain effective supervision. Lee (2008) agreed with this opinion and further reported that the benefits of working with

experienced supervisors are enlarging students' knowledge, completing research studies on time, obtaining more information, and developing academic skills. Some scholars recognised the supervisors' experience as more important than supervisors' knowledge, because supervisors need to support their students learning to focus not only on the knowledge, but more on how to learn (Manderson 1996). This point of view is consistent with Chinese legislation regarding doctoral supervisors. In China, qualified doctoral supervisors should have successful experience in supervising master students (the whole process of supervising research of master students lasts at least two years in China) (国务院学位委员会 1995). If doctoral supervisors work in universities in China, they also need to have teaching experience. Therefore, supervisors' experiences have been paid much attention in the doctoral education system in China, and have been listed as one of the regulations of supervisors' selection criterion since 1995.

From the supervisors' responses, accompanied by the increase of supervisors' experience, supervisors accumulate their communication skills, which help to deal with the complex relationships with their candidates in daily formal and informal research activities. This point of view is supported by some researchers. For example, Lee (2007) and Ismail Abiddin and Hassan (2011) find that effective communication is the foundation for supporting students to complete their projects, and effective communication also makes students feel not overwhelmed and menaced with the relationship. As the findings showed in chapter 6, lacking communication experience may lead to a series of problems, such as serious mistakes and then broken relationships with students. Wright, Murray & Geal (2007) had similar results in their research based on 20 participants. They indicated that due to the low communication, some candidates felt isolated, disconcerted with their supervisors, which resulted in broken relationships with their supervisors or missed their learning goals. Due to the traditional Chinese culture's influence, in this research the results showed that the majority of doctoral supervisors remain in the special parental relationship, which looks different to relationships in Western countries. A more detailed consideration of the special relationships between doctoral supervisors and students or among doctoral candidates, will be discussed in Section 7.2. Therefore, I argue, based on the findings that doctoral supervisors, particularly in China, need to be experienced to communicate well with students.

Duty 2 : Cultivating people

Reviewing the results in the data analysis, the other main duty of doctoral supervisors is cultivating people during the whole doctoral supervision process. The point of view looks similar to previous research. For example, Doloriert, Sambrook and Stewart (2012) and Wisker (2001) indicated that one of the key dimensions of doctoral supervisors is social support. Some scholars indicated that doctoral supervisors have responsibility for personal support (Collins 2015; Taylor, S & Beasley 2005). However, the meanings are different between the personal support in Western countries and cultivating people in China. As the literature shows, in China, the additional responsibility of doctoral supervisors is *pinde* education. *Pinde* education exists in every social environment involving child care, primary education, higher education, university education, and the working environment (Cai 2005; Li, D & Huang 2013; People 2015).

In this research, the data mainly showed that *pinde* are refined by two levels in the doctoral education system in China. The two levels are having:

- professional academic attitudes; and
- social ethics.

This section focuses on discussing the responsibilities of doctoral supervisors. So the question how these responsibilities have been carried out in daily practice by doctoral supervisors, such as how to do the *pinde* education, will be introduced in Section 7.2.

As the main mediator between the academic institution and the doctoral candidates in the Chinese context, supervisors seem to need to spend more energy than in Western countries in charge of students' programs. This is particularly in the process of *pinde* education, because of the One Supervisor Policy adopted in China, which has emphasised the importance in supervisors' duty 1.

Therefore, as the key position for training candidates is mainly carried out by only one supervisor, I understand why the regulation in China regarding selection criterion of doctoral supervision is so strict. As the literature emphasised, doctoral supervisors since 1995 in China are selected only from the group of Professors (or an equivalent position) who are well versed in their discipline (国务院学位委员会 1995). In order to offset the

lack of doctoral supervisors, the position of doctoral supervisor is open for some Associate Professors in some Chinese universities in the recent ten years (Liu, Z 2005). However, in Chapter 6, the majority of interviewees from the group of doctoral candidates and postdoctoral fellows indicated that they preferred to follow the supervisors with title of Professor rather than Associate Professor. From the supervisors' perspective, due to the important role of doctoral supervisor in China, the majority of interviewees pointed out that the supervisors should have strong knowledge and academic skills, be experienced and well-resourced, and have good *pinde*, and therefore only members from the Professors' group would be the ideal candidates for the positions of doctoral supervisors. Therefore, that is a reasonable explanation why the position of doctoral supervisor is regarded as a higher position and a kind of honour title (中国远程教育 2005) in China compared to Western countries.

7.1.2 How does the cultural custom and policy practice of China impact on the doctoral supervisors' strategy to train their candidates in the Management discipline in China?

In this research, the majority of doctoral interviewees from the supervisors' group pointed out that they have no formal training or refreshment lessons to be doctoral supervisors. The previous Western studies (Amundsen & McAlpine 2009; Peelo 2011; Turner 2015) have similar results. Turner (2015) confirmed this point of view throughout the reflection from eleven early career academics from UK university, and stated that even if three of the participants had joined in the section of an introductory supervision training, all the participants in this research were unprepared and obtained limited formal support as supervisors. Without formal training to understand their roles both doctoral supervisors and candidates could bring negative influences for doctoral supervision (Lee 2007). The data showed that in order to overcome the disadvantage and enlarge the supervision knowledge, most respondents from the supervisors' group pointed out that they obtained many useful suggestions about how to effectively supervise doctoral education by reading academic journals' discussions on postgraduate education, which have been purchased and provided by their academic institutions.

Through refining the results in Chapters 5 and 6, in order to provide abundant support and assistance for doctoral candidates, supervisors' strategies for improving the quality of doctoral supervision are divided into four aspects.

Firstly, in order to ensure students successfully complete their degrees and achieve the basic requirements, the data in this research suggested that supervisors need to consider three main elements: the legislation formulated by Chinese government for the higher education system, the requirements stipulated by academic institutions, and the demands from the labour market in China. Then supervisors need to develop reasonable working strategies to assist their candidates to graduate. Previous Chinese literature involved all three fields showed that the qualified and expected graduates should have:

- Good *pinde*;
- Broad theoretical knowledge background and professional knowledge;
- Relevant Independent working ability.

(The National People's congress of the people's republic of China 2016)

In order to provide the abundant support for doctoral candidates, supervisors need to understand the basic requirements of doctoral degree granting, which are formulated by the Chinese government and academic institutions in China. The requirements of granting doctoral degrees are different in different academic institutions. For example, some universities require that candidates publish numbers of journal articles or reference papers relevant to their theses contents within the limited studying period. If candidates miss the deadline to publish their articles, they won't gain the doctoral degree (Graduate School of Renmin University of China 2018; Tsinghua 2010). Some universities grant doctoral degrees only to candidates who pass the CET-6 English examination (Graduate School of Beijing Jiaotong University 2017). Furthermore, in order to assistant candidates to have a proper career in the future, supervisors need to learn from the labour market the trend of demands for graduates in their discipline. The majority of interviewees from both doctoral candidates and doctoral graduates pointed out that they expected that supervisors could offer support on their career path. The support involved the supervisors' social network, the development of candidates' academic knowledge and skills during the whole

doctoral supervision process, and the topic selection, which could link with the current hot and popular topics favoured by government.

From the supervisors' responses, some supervisors have considered these issues. For example, *Supervisor 1B* regularly passed his candidates the current popular topics, recognised by the current labour market, government, and publication in the top journals. He found the candidates who followed supervisors' suggestions regarding topic selection, published their journal papers easily, and found their ideal job relevant to their disciplines within a short time. However, some supervisors indicated that, as supervisors, the main tasks are supporting students to achieve the requirements of doctoral degrees. Finding a job is the students' own responsibility rather than a concern of the doctoral supervisors. So these supervisors do not feel that they need to consider detailed demands from the labour market.

Secondly, based on my data which showed the advantage when doctoral supervisors' background matched with the candidates' research projects, most Chinese doctoral supervisors selected only the candidates who have similar research topics or research methods to their area of expertise. Doctoral supervisors are the good example in front of their candidates in areas both academic and personal within the Chinese context.

In this research, the majority of doctoral interviewees from the supervisors' group pointed out that they have no formal training or refreshment lessons to be doctoral supervisors. The previous Western studies (Amundsen & McAlpine 2009; Peelo 2011; Turner 2015) have similar results. Turner (2015) confirmed this point of view throughout the reflection from eleven early career academics from UK university, and stated that even if three of the participants had joined in the section of an introductory supervision training, all the participants in this research were unprepared and obtained limited formal support as supervisors. Boehe (2016), and Lee (2008) further indicated the importance of the similarity, because supervisors' power and expertise mainly rely on their academic knowledge background. Moreover, in order to have strong confidence and special power to supervise their candidates, in this research the data showed that all supervisors' interviewees emphasised their other strategies, that they never stop improving and refreshing their own professional knowledge and they kept publishing books and articles in higher ranking journals.

Furthermore, as the good example of being the person with good *pinde*, supervisors also need to improve their individual *pinde* to be an effective performer to shape and pass the good *pinde* to their doctoral candidates during the whole doctoral supervision process. In fact, one of the selection criterion of doctoral supervisors is having good *pinde* (国务院学位委员会 1995). When discussing *pinde* in Chapter 6, the majority of candidates' and graduates' respondents paid much attention to their supervisors' *pinde*. Doctoral supervisors in their research have recognised that they needed to improve their *pinde* both in academic spirit and in daily life standards, and then the supervisors made themselves good enough to guide their students.

Thirdly, in the light of the results in Chapter 6, understanding students' backgrounds before they start their projects is important to doctoral supervisors. Students' backgrounds include students' previous working, education and knowledge backgrounds. All three groups of respondents indicated that the candidates who kept studying the same discipline from bachelor to doctoral degree have considerable competence in the role of doctoral candidate, because they had mastered the basic theoretical knowledge and research skills. The findings are supported by previous studies (Tennant & Roberts 2007; Watt 2016); which showed that students' previous research experiences and knowledge backgrounds contributed to students' doctoral good progress. That is because students' previous working skills, knowledge and experiences need to be used to solve the problems (Watt 2016). The results in Chapter 6 showed, the students who had no relevant experience and knowledge faced more difficulties doing their projects. Similar problems occurred in other research studies (Askew et al. 2016; Ismail, HM, Majid & Ismail 2013; Lessing, AC & Schulze 2002; Perkins 2006), which could help to build up the theory in this thesis. For example, some studies emphasised that the candidates' previous disadvantage might directly influence them in achieving the targets of independent researchers (Lessing, AC & Schulze 2002) or slow their PhD progress (Watt 2016), adding to the already heavy workload for supervisors (Askew et al. 2016). Therefore, based on the importance of students' backgrounds, in order to effective guide candidates, doctoral supervisors need to learn about candidates previous working and studying experiences.

Finally, the data pointed out that the majority of doctoral supervisors need to remain in proper relationships with different groups for effective support of their students within

the Chinese context. The groups which supervisors might be involved in include candidates' peers (the discussion about peers will be introduced in Section 7.2), other lecturers, administrations, and students' family members. Nearly half of the respondents indicated that candidates obtained benefits from other lecturers who were lecturers and experts in similar fields to the students' projects. Candidates generally knew these lecturers and experts through their supervisors. In China, supervisors needed to provide suggestions about the particular professional course candidates had to complete, in their early study stage. Passing the relevant course assessment is a precondition and necessary requirement to continue their research projects (Ministry of Education of the People's Republic of China 2016c; Xu, R 2013). Compared to some Western research which indicated that doctoral candidates obtained formal training of systematic knowledge and research methodology provided by the departments level through courses and workshops (Cuthbert & Molla 2015; Gube et al. 2017; Roulston et al. 2016), some complaints from doctoral candidates still appeared in this research. The problems were focused on the course design, such as useless knowledge. Therefore, Chinese doctoral supervisors need to remain in good relationship with other lecturers and experts, learning their working styles, who may offer necessary support to candidates.

Furthermore, only some respondents in this research mentioned that the administration staff, librarians and editors offer the necessary support for helping them to find out the relevant data or information involved in both academic resources and living information. In Western literature, many researchers have recognised the supervision is more than the sole relationship between supervisors and students and relevant activity (Grant & Pearson, 2007; Watt, 2016), and effective research community can provide more resources to impact on doctoral candidates (Gardner 2008; Löfström & Pyhältö 2014; Pyhältö, Stubb & Lonka 2009). The positive consequences involve increasing students' personal growth and helping students complete quickly (Watt 2016; Winchester-Seeto et al. 2014). However, compared with Western research, the results from Chapter 6 found that most Chinese supervisors encouraged assistance among candidates' *tongmen*, which has been discussed in Section 6.4, instead of other supports, such as editors and administration staff, because peers looked like providing most of those supports for doctoral candidates.

In addition, the results indicated that the majority of doctoral supervisors like to maintain proper relationships with candidates' family members. In China, due to the influence from traditional Confucian culture, the position of teachers or lecturers is regarded as fatherly (Lin 2016). There is an age distance between candidates and supervisors in present day China:

- most full-time doctoral candidates are young (around 30 years old), and
- more than three quarters of doctoral supervisors are more than 45 years old.

(Ministry of Education of the People's Republic of China 2014)

The data in Chapter 6 showed that nearly all supervisors still played a parental role with their full-time candidates. When I reviewed the literature regarding doctoral degrees, two Chinese policies are recognised, which may continue the age distance between supervisors and candidates, so the parental relationship may be continued in the future. The two policies in China are:

- in order to improve the doctoral candidates' quality, many research universities and research institutions started to reduce the part time doctoral programs. Some universities do not even open the door to new part-time doctoral candidate any more (Zhang, LQ & Sun 2015), possibly because the part-time students may not focus enough on study.
- the applicants to be doctoral candidates are generally no more than 45 years old. (Ministry of Education of the People's Republic of China 2014; Tsinghua University 2010).

Due to the influence from the traditional Chinese culture and present policies involving special relationships between teachers and students, the younger doctoral candidates, as mentioned above, sometimes supervisors need to establish the necessary relationship with students' parents or family members.

7.2 How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on supports students' projects and individual development?

Section 7.1 provided the answer how does the cultural custom and policy practice of China influence the responsibility and strategy of doctoral supervisors in the Management

discipline in China. *Pinde* appeared in several different sections. Firstly, due to the impacts from the traditional Chinese culture and present Chinese policies, Chinese doctoral supervisors have two main duties: delivering academic knowledge and skills and cultivating people, which briefly introduced the term of *pinde* education. And then when I argue how the culture and education policy of China impact on the doctoral supervisors' strategy to train their candidates, one of the supervisors' strategies is: improving supervisors' individual *pinde*, which focused more on the supervisors' perspective; As the performer for passing the *pinde* to their candidates, they should be a good model and improve *pinde* for themselves.

This section answers the question:

How does the cultural custom and policy practice of China impact on the daily doctoral practice focusing on supports students' projects and individual development in the Management discipline in China?

This section reports the contents involving *pinde* education; however, the following contents will focus more on why the *pinde* is important to doctoral candidates and how supervisors pass *pinde* to their candidates.

7.2.1 *Pinde* education

As the analysis of results in Chapter 6 showed, all interviewees reported that *pinde* education is necessary in doctoral practice and it has been significantly recognised and carried out across the whole doctoral supervision within the Chinese context. The importance of *pinde* in China, particularly in the Chinese doctoral education system, has been pointed out by previous Chinese literatures (Liang, J 2007; Zhang, W & Yang 2003).

It is a personal and social value within the Chinese social environment that having good *pinde* is praised highly in all fields (Fang 2010; People 2015; Zhang, LJ 2015). Similarly, *pinde* in education is one of the necessary targets, to support doctoral candidates' personal development, which is achieved through the assistance of research institutes and doctoral supervisors in China. Due to the influences from both Chinese doctoral education policy and traditional Chinese culture, doctoral supervisors need consciously or unconsciously to put their energy into *pinde* education.

One influence on doctoral education policy is that a doctoral degree is not granted to a person who has no good *pinde* (The National People's congress of the people's republic of China 2016). The other influence is derived from traditional Confucian culture. As Chapter 2 literature discussion showed, one of the Chinese supervisors' fundamental functions is person-cultivating. The function of personal-cultivation, which focuses on *pinde* education, is significantly recognised in higher education level, as the data in Chapter 5 reviewed "Doctoral graduates are elites. If they improve themselves in areas such as *pinde*, they can make bigger contributions to society rather than the contributions they can make by simply doing research (*Responder 3B*)".

Data analysis in Chapter 5 in this research showed the approaches and practices of doing *pinde* education by doctoral supervisors include three main ways: supervising students to join the classes or seminars regarding the CCP's organisation, being a good *pinde* model, and highlighting and correcting the students' *pinde* disadvantages. The data showed that *pinde* education in contemporary Chinese academic evaluation system can be divided into three levels: having appropriate political attitudes and complying with law and legislation, having professional academic attitudes, and showing social ethics within the Chinese academic context.

Firstly, as Chapter 5 showed, competent doctoral supervisors and qualified graduates need to have particular political attitudes and comply with legislation in the Chinese context. This finding is consistent with the existing Chinese government documents and the law regarding Chinese degrees. In the National Organisation conference in 2014, Prime Minister Xi emphasised that "Chinese cadres are led by Communist Party of China, and Chinese cadres should have firm belief," which means "having correct political attitude and abiding political discipline within the Chinese context" (People 2015; Zhang, LJ 2015). Chinese degree law regulated that 'degree applicants, especially doctoral candidates who are as the reserve of cadres, need to satisfy the two following requirements: upholding the leadership of Chinese CCP, and supporting the socialism system', and the degree law further regulated that the applicants need to have good *pinxing*, which involved good *pinde* and behaviours (Ministry of Education of the People's Republic of China 2014). Furthermore, a formal notification on awarding a doctoral degree, which is issued by the degree committee of state council, indicates that

doctoral graduates should abide by Chinese legislation and rule of law; otherwise, they have no chance to gain doctoral degrees (Ministry of Education of the People's Republic of China 2016c).

In order to effectively assist doctoral candidates to complete their doctoral degrees, according to the data analysis finding, Chinese supervisors need do the following things to make sure their doctoral candidates have appropriate political attitudes and comply with Chinese legislation.

My data showed that in the first meeting between supervisors and students, supervisors need to assist students to make a course plan. Supervisors need to confirm that all their students select a compulsory course (a required subject), which is 'Marxist Philosophy'. The aim of the course is improving students' Marxist theoretical foundations and then improving students' political attitudes for being communists and supporting CCP's leadership. Dong (2008) further indicated the importance of Marxist theory, which is the core guidance of the CCP in contemporary China. Without the guidance of Marxist theory, the CCP would collapse; China would be split, Chinese socialist modernization would not be carried out; and Chinese citizen's rights and benefits would be broken (Dong 2008). Therefore, as the potential core manager and CCP cadres, who graduate from the Management discipline particularly at doctoral level, their political attitudes are linked closely with their career paths. In China, doctoral candidates have to pass the required courses and then have the right to start their further research (Ministry of Education of the People's Republic of China 2016c). In order to make sure doctoral students are ready to commence their research, the results in this research showed that supervisors need to inform and check regularly students' curriculum design and the courses' progress.

Furthermore, according to respondents' reflections, the majority of Chinese supervisors keep in touch with their students, particularly full-time students, by different methods, such as telephone, email, group activities and face-to-face meetings. One aim of regular student contact is learning students' ideological trends and students' journeys, to make sure students comply with Chinese legislation. Supervisors sometimes need to pass the important political events or CCP's ideas to their students in their meetings. For example, the data showed: because all interviewees are from the Management field, both supervisors and candidates always discussed the topic of the conferences' contents of the

Political Bureau and the Politburo standing committee of the communist party of China, such as the discussion on the evaluation indicator of assessment of CCP cadres.

Secondly, Chinese teachers have responsibility to assist doctoral students to shape professional academic ethics. As the first formal path-finder in the academic area for doctoral candidates, supervisors' professional academic ethics and working attitudes have normally been an example for their doctoral candidates (Zhang, W & Yang 2003). In the light of the data analysis results in Chapter 5, doctoral candidates will consciously and unconsciously resemble supervisors' *pinde*, particularly in professional academic ethics and working attitudes.

In the light of the significant recognition in descending order by respondents' feedback, which showed in Chapter 5, the professional academic ethics involve four aspects that have been supported by existing research: respect, beneficence, justice and fidelity from Western literature (Löfström & Pyhältö 2017). Some research indicated that the academic ethics involved non-sexist, non-prejudiced, and non-authoritarian attitudes (Butterworth, Faugier & Burnard 1992), tolerance (Löfström & Pyhältö 2014), non-maleficence and truthfulness (Löfström & Pyhältö 2017).

In China, doctoral supervisors also need *pinde* education focusing on social ethics. Compared to other two sorts of *pinde* education, development of social ethics is different during the doctoral supervision process. In this research, the data supported by some research reported that social ethics includes: benevolence, righteousness, rationality, which linked with charity and helpfulness (Baiké 2018a).

To sum up, shaping good *pinde* is a significant supervisor' function in the process of doctoral supervision. There are some new findings, which are not showing in existing literature, especially in the aspect of doctoral supervisors being good role models in social ethics, such as caring for public property, not being too materialistic, being tolerant and preferring to share detailed resources in this research. In addition, although I found that some research recognised that the issue of academic corruption (Ren 2012; Yang R 2015), it was not raised as a problem in my thesis. That might be because all participants joined in my research had good *pinde*, or might be because they considered that the researcher had been introduced by a professor who was from the same university to collect data.

7.2.2 Group-way education

Data analysis reviewed in Chapter 5 found that the majority of Chinese doctoral supervisors use group-way to support their students' projects. The styles of group education involve group meetings (300 comments), working as research assistant by participating in supervisors' projects (69 comments), joining coursework (49 comments), participating in group social activities (42 comments), gaining the opportunities of internship (32 comments), and attending conferences (25 comments). Findings in Chapter 5 suggest that group education influences doctoral supervision as the following Table 7.1 shows.

Table 7.1: Conclusions on the influences between the ways of group activities and doctoral supervision

The types of Group-way education	Results related to the influence doctoral supervision (DS)
Meeting	Effective meeting influences DS. (P)
Working for Supervisor's project	Participating in supervisor's projects influences DS. (P+N)
Coursework	Professional coursework within good design influences DS. (P)
Group activities	Group activities influence DS. (P)
Internship	Students' internship with supervisor's agreement influences DS. (P)
<i>Pinde</i> education	<i>Pinde</i> education influence DS significantly. (P)

P: influence positively N: influence negatively DS: Doctoral supervision

Source: Developed for this research

Two main reasons lead to this result about group-way education. One reason concerns the Chinese doctoral supervision background, as Chapter 5 found, the majority of supervisors faced the fact that they have limited energy and time for supervising their doctoral students. This situation has been paid much attention by Chinese scholars in the recent ten years. According to the statistics from Ministry of Education of the People's Republic of China (2015c), the numbers of doctoral supervisors and students is unbalanced. The majority of Chinese doctoral supervisors, particularly those who work in the leading Chinese universities, need to supervise many doctoral candidates, as well as master research students (two or three years' program) at the same time (Yi 2007). Therefore,

limited energy and time of academic staff is one of the reasons which lead most Chinese doctoral supervisors to guide their candidates by group-way education.

The data showed that the other reason for group education is the benefits from group-way of learning, which effectively assist doctoral candidates grow up to independent researchers and shape their leadership styles. As the results showed in Chapter 5, the group-way education includes different forms: regular group meetings (called *lihui*) with supervisors; participating in supervisor's projects; organizing or attending conferences; joining in the course work; and participating in group activities, such as reading groups, discussion groups, workshops, seminars, and *tongmen*'s informal social activities. The interviewees' descriptions in chapters 5 and 6 found that accompanying the rise of group-way education/practices, the roles, responsibilities and the relationships among peers (particular *tongmen* who are supervised by a same supervisor) change, and benefits of group-way education increase for both supervisors and students.

As Chapter 5 reported, supervisors like to centralize students' gatherings, because they can pass on general information and learn about students' progress regularly. Furthermore, supervisors in this research emphasised that they gain better academic outcomes and enlarged students new academic thinking as well as professional knowledge from different perspectives in discussions by regular group-way working.

From the students and graduates' perspectives, the benefits for students have been shown in the following three aspects. Firstly, this group-way helps students to improve professional knowledge and academic ability. Students build up broad research-knowledge in their disciplines via different projects, as they participate in different groups of research projects, or as they learned more about other candidates' projects. The increased academic ability involves communication ability, critical thinking ability, team work ability, group-learning ability, time management, leadership, and ability to handle problems under pressure. So after candidates have been supervised this way, most students have successfully shaped up their leadership abilities both as a leader of a research project and as a manager in a relevant working position after effective rotation roles within the group work. The group way education effectively breaks the 'rule of deference to muted criticism which has been pointed out by Singh (2009) and then help

doctoral candidates to improve their critical thinking ability. These are very important practices to cultivate in candidates in the Management discipline, because the graduates' career path in the future focuses more on the position of manager, team-leader in different departments or academic in Management. These trends are supported by some government and employment policies (People 2003; Zhu, Y 2017).

This research confirms that the approach of group academic education is an effective way used by supervisors to improve PhD candidates' professional knowledge, academic ability and outcomes (Halse 2011; Manathunga 2015). Most Western literature indicated that the popular and positive formal academic activities involved coursework (Cuthbert & Molla 2015; Kiley 2014), attending conferences (Grant & Pearson 2007; Manathunga 2015; Watt 2016), participating in different discussion groups (Aitchison 2014; Murray 2014; Roulston et al. 2016), and internships (Hum 2015). In terms of interviewees' feedback, the majority of Chinese doctoral candidates expected to have more opportunities to participate in most styles of group education, and they understood the advantages of group education. However, due to the limitation of academic funding and universities' resources, these academic resources do not seem be sufficient to support candidates' expectations within the Chinese context (Li, S 2006).

Secondly, Chapters 5 and 6 show the benefit of expanding networks and building close-relationships both between supervisors and students, and among *tongmen*, via group-way learning. Manathunga and Goozée (2007) emphasised the importance from the supportive peer group environment, instead of focusing more on *tongmen*, for both supervisors and students. They indicated that building the peer group environment benefits to increase students' autonomy and maintain the harmonious relationships between supervisors and students. Furthermore, the majority of interviewees reported that in China, the majority of *tongmen* maintain a special close relationship, by informal group activities. This finding is consistent with some previous Western studies that showed informal group activities offer personal support particularly for newly arrived students (Manathunga 2015). The meaning and the implementation of close relationships looks different within the finding in this research. According to the results shown in Chapter 6, this research emphasised that the relationships among *tongmen* are like siblings in a big family. The roles of doctoral supervisors are diverse as one of the parents,

a leader and a boss in this family. According to the entry year of subsequent supervisors, the roles and responsibilities of students look different. If the person enrolled earlier, they are called ‘big brother’ or ‘big sister’ by new students, who are ‘young brother’ or ‘young sister’. Some big siblings are regarded as ‘co-supervisor’ in young siblings’ subconscious, as *Responder 3B* indicated:

When I was doing my doctoral thesis, my ‘big sister’ gave me many suggestions to design my questionnaire...Later I discussed the contents with her, and asked her for her opinions on every chapter I wrote....I believed that I got much help from her..., because we are tongmen ... So it is fair to say that, except for my supervisors, she looks like my co-supervisor.

The data reported in Chapters 5 and 6 that most Chinese doctoral supervisors remain in a family-type of relationship with their students and they tried their best to create an atmosphere to encourage *tongmen* to establish close relationships like family members as well. The benefits from this relationship as *Responder 2P* indicated: “these actions can make the familial feeling stronger, and candidates grow up soon”. When I did interviews, I found that many candidates enjoyed building up the strong trust relationship with their *tongmen* as well as their supervisors. For example, some interviewees indicated that if they did research in similar areas with their *tongmen*, *tongmen* could share most of their thesis outcomes in details, before the thesis had been submitted or published.

Although the findings from previous Western studies pointed out that good supervisory relationships are important to doctoral supervision (Collins 2015), and the positive and trusting relationships are important for both doctoral supervisors and students’ development (Collins 2015; Cornér, Löfström & Pyhältö 2017; Lee 2007; Marland, Lyttle & Paul 2003; Waghid 2006) in this research, the approaches of creating the close relationships seems different to the previous research.

In this research, I found that the way of sharing the whole thesis benefits the new students, who did the similar research with *tongmen*. Using this way could save their time and energy to identify quickly their research directions. This way of doing a thing is also good for keeping research improving further and developing discipline. However, when I learned this the extent of sharing individual doctoral outcomes by *tongmen* at the early period, I worried about some negative aspects regarding intellectual property might exist,

because *tongmen* share too much detailed content about their individual projects. However, I did not find the interviewees worried too much about this issue.

The result from this research did not directly explain why the interviewees did not worry about intellectual property. Nevertheless, reviewing the literature regarding Chinese *pinde* education, which showed in Chapter 2, I believed that most supervisors and students did not worry about this issue because of *pinde* education and the influence of Chinese culture. As I mentioned in Section 7.1, a person with good *pinde* should have strong responsibility, be honest and respect others' outcomes. The behaviour of infringing on intellectual property is recognised obviously as bad *pinde*, especially in academic and research areas. According to the degree provision: a doctoral degree is not granted to a person who has not good *pinde* (Ministry of Education of the People's Republic of China 2014; The National People's congress of the people's republic of China 2016), therefore most doctoral candidates might not want to take this risk for bad *pinde*. Furthermore, in terms of the data from interviewees' description, the idea of sharing the detailed materials on individual research projects is generally derived from supervisors' suggestions. After I reviewed the literature regarding *pinde*, I believed that a doctoral supervisor as a mediator (go-between) with good *pinde* is the best guarantor to avoid this issue, and s/he would be fair-minded to serve each doctoral candidate. In fact, when I reviewed the data, I found that the majority of supervisors suggested that the candidates, who have nearly completed their whole thesis, share their outcomes to the 'young siblings', who are in the early stages. So this way could reduce the negative competition feeling among candidates and it also provides enough time to avoid the infringement happening.

I argue, based on the findings that most students, passing their important materials to their 'young sibling', had got similar documents from their 'big brother or big sister', they had similar experiences and gained benefits from these actions. Therefore, they had built up strong trust relationships with their supervisors and *tongmen* during the previous supervision process, before they passed individual documents to others. Also, due to the *pinde*, there seems to be an invisible hand that stops the students copying the work of others.

In addition, the findings from Chapters 5 and 6 pointed out that accompanying the growing up of doctoral candidates from 'young sibling' to 'big sibling', the roles and

responsibilities of candidates in different stages have changed. The data in this research found that most Chinese supervisors arrange ‘big sibling’ to take care of the young *tongmen*, when supervisors arrange group-way education involving participating in supervisors’ projects, organizing conferences run by doctoral supervisors, and group activities such as workshops and seminars. For example, some supervisors let one ‘big sibling candidate’ hold a position as Associate Director of a research project, in charge of the project’s process. As an Associate Director, this ‘big sibling candidate’ plays a manager and supervisor role for other ‘young sibling candidates’ who join in this project. The research process, particularly in the way of group education, is a fantastic chance to shape leadership and then let a candidate turn to an independent academic and manager. That is very important to candidates particularly in the Management discipline. Although the majority of interviewees in this research emphasised that they have been trained mainly by group-way education for improving their broad knowledge and research skills, in order to support each student to complete successfully the individual’s thesis, I found nearly all respondents indicated supervisors provided one-to-one individual guidance for supporting their candidates to master the deep, specifically professional knowledge and offer the solutions through completing their projects.

Accompanied by the advantages of group way education for supporting candidates’ projects and individual development, the disadvantages of group education also appeared. Some complaints showed in Chapter 5, particular focusing on four main typical examples. Firstly, some candidates’ interviewees pointed out that the group meeting needed to control the numbers of group members. Otherwise, too many members, or the members who have no similar research topics in the same group meeting, would waste the candidates’ time. Secondly, some interviewees complained of too much pressure and being too busy, when candidates worked for their supervisors as one of the projects’ group member. Thirdly, the complaints from doctoral candidates were that supervisors did not like students to go out for internships. Finally, as I mentioned above, some Chinese supervisors encourage *tongmen* to share detailed thesis information, and the doctoral candidates did not mention the risk of this behaviour. Although this action looks safe within the Chinese context, because the tradition of Chinese value regarding good *pinde* looks like the guarantee to avoid the negative things occurring, I still can recognise the risk influencing doctoral candidates’ graduations.

7.3 How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degree in the Management in China?

According to the findings from data analysis shown in Chapter 5, five main factors motivate candidates to start their PhD or stimulate them to continue their doctoral processes within the Chinese context. The five motivation factors include:

- PhD linking with candidates' career paths, involved in being academic, for keeping current job position, or being non-academic
- Improving candidates' general *suzhi*, including both knowledge and ability
- Transferring *huji*
- Interesting research topic or discipline
- Other factors, such as enlarging individual social network, making family members' expectations come true, achieving doctoral degree.

The motivation factors can be divided into two types: intrinsic (internal) motivation factors and extrinsic (external) motivation factors. These two types of motivation factors examined in this research are shown in Table 7.2.

Table 7.2: The types of motivation factors in this research

Internal motivation factors	External motivation factors
<ul style="list-style-type: none"> • Doing PhD linked with career path, such as academic and keeping current position • Improving general <i>suzhi</i> • Being interested in discipline and research topic 	<ul style="list-style-type: none"> • Doing PhD linked with non-academic career path (good stepping-stone for future career; reduce pressure of finding a job) • For exchanging <i>huji</i> • Enlarging social network • Gaining degree • Satisfying family members' expectation

Source: Developed for this research

As data analysed in Chapter 6 shows, the motivations for doing a PhD from doctoral candidates are complex, and generally do not only depend on a single factor. It seems that integrated motivation of doctoral candidates influence the whole supervision process.

When the internal motivations for undertaking and continuing a PhD play a dominant role during the supervision process, the majority of doctoral candidates prefer to put more effort into their study and they expect to have high quality outcomes. In order to improve

their professional or personal knowledge and abilities, particularly linking with their academic path or relating to their current job position, these candidates like to spend more time and energy on their research projects, and they generally like to participate in the activities relating to building up their academic skills, such as working for supervisors' projects, attending academic conferences, and joining in different workshops, seminars and coursework.

On the contrary, when the candidates' external motivation for doing a PhD plays a leading role, they usually expect more benefits after they graduate, instead of anticipating gaining high quality academic outcomes. The benefits involve *huji* transformation and gaining more than 80 additional welfare benefits within the *huji* and working opportunities after they complete their doctoral degree. The reasons leading to these results derive from the influences of Chinese culture and contemporary policies, such as *huji* and relevant well-being regulations, mentioned in Chapter 2, particularly in big cities like Beijing and Shanghai (Cha 2005; Chen, H 2012; Chen, Z, Lu & Xu 2014; Du, X 2011; Huang, Z 2012; Liu, L 2014; Tao & Wang 2014; Wan, H & Li 2013; Wang, Q 2014). Therefore, these types of candidates find it hard to keep studying, and they may not want to put much effort into relevant academic activities outside their discipline. However, the data indicated that these candidates were more interested in completing their project as soon as possible, and they enjoyed more opportunities of internship in public service or big companies, which benefit their individual development in the future, particularly in the Management field.

In summary, considering the influence from cultural custom and policy practice of China, in order to provide effective supervision, which makes both supervisors and students' satisfied, doctoral supervisors need to learn students' learning targets and purposes for doing a PhD. Then during the whole supervision process, it is necessary that supervisors also need to confirm regularly with candidates their motivation and demands of doing PhD and what they expect after they graduate. This point of view is supported by some Western scholars. Identifying candidates expectations is the urgent need for doctoral supervisors and the benefits include the guarantee of well-matched working attitudes and styles between supervisors and students (Askew et al. 2016; Boehe 2016; Orellana et al. 2016; Turner 2015), and improving the high-quality outcomes (Boehe 2016).

Through refining the data in this research, I found that most Chinese supervisors adopt the approaches of focusing on different types of candidates to adjust the planning program in time. In general, supervisors offer different practices for satisfying candidates' demands, as well as to touch the basic requirements of the research institution, as the following show:

- For the candidates whose internal motivation plays guiding role, supervisors:
 - focus more on person-orientation training;
 - offer more opportunities for relevant research projects, workshops, seminars, conferences or other jobs, such as research assistant;
 - provide more chances to learn how to be an academic and then encourage candidates to have high quality research outcomes through strict academic training.
- For the candidates whose external motivation in the leading position, supervisors:
 - Focus on both person-orientation training and project-orientation training;
 - work more on project-orientation training;
 - still pay much attention on the importance of person-orientation training;
 - provide more opportunities relating to students' demands, such as internship chances depending on students' career demands in the future.

7.4 Conclusion

This chapter presented the discussion on the research problem: understanding the cultural custom and policy practice of China influence on doctoral supervision in the Management in China, throughout seeking answers to three sub-questions:

- How does the cultural custom and policy practice of China influence the responsibility and strategy of Chinese doctoral supervisors in the Management discipline in China?
- How does the cultural custom and background of China impact on the daily doctoral practice in the Management discipline in China?
- How does the cultural custom and policy practice of China motivate students undertaking and continuing their doctoral degrees in the Management discipline in China?

The discussion of this research indicated that in China due to the influence from traditional Chinese culture and current Chinese policy, doctoral supervisors had two main traditional duties: delivering academic knowledge and skills, and cultivating people. Within the Chinese context, cultivating people means to focus more on shaping candidates' *pinde*. Supervisors, as a principal part playing vital roles during the whole doctoral supervision process, need to consider the following four aspects for making sure their candidate complete degrees successfully and reach graduates' requirements. The four doctoral supervisors' strategies are:

1. Supervisors need to understand relevant requirements involved in legislation formulated by the Chinese government in the higher education system, the claim stipulated by academic institutions they worked in, and the demands of the Chinese labour market.
2. Supervisors should have and keep continuing to improve both their research knowledge and research skills, and *pinde*.
3. Supervisors need to understand students' backgrounds and expectations before they supervise their candidates.
4. Supervisors should remain in proper relationships with different groups to provide effective support for their candidates.

Based on the influence of traditional Confucian culture and the impact on Chinese policies, such as the selection criteria of doctoral supervisors, doctoral graduates' criteria, and political trends, two main approaches are used in daily practice during the whole doctoral supervision process. The two approaches include *pinde* education, which focuses more on carrying on the duty of cultivating people, and group-way education which benefits both on delivering of academic knowledge and skills, and on shaping candidates' *pinde*.

Doctoral candidates, as another principal part during the doctoral supervision process, are stimulated by their internal and external motivation factors to undertake and continue their doctoral degree. They are also affected by traditional Chinese culture and policy, such as *huji* in present China. In order to provide effective supervision and improve the satisfaction for both supervisors and candidates, most doctoral supervisors adopt the different forms of group-way approaches to supervise different candidates' demands.

The following Chapter will provide conclusions and implications of this research.

Chapter 8: **Conclusions and Implications**

Following on the chapter of data analysis, this chapter presents conclusion of this research. Chapter consists of four sections as Figure 8.1 shows.

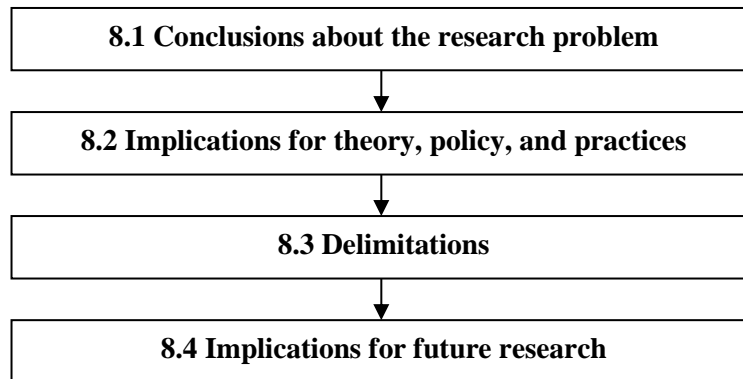


Figure 8.1: Structure of Chapter 8

Source: Developed for this research

8.1 Conclusions about the research problem

The aim of this research was to discover how the cultural custom and policy practice of China influences doctoral supervision in the Management discipline in China. Based on this target, this research was conducted by three main objectives:

- Exploring how the cultural custom and policy practice of China influences doctoral supervisors' responsibility and strategy within the Chinese context;
- Investigating how the cultural custom and policy practice of China impacts on the daily doctoral practice, focused on both supporting students' projects and assisting individual development; and
- Discovering the ways how the cultural custom and policy practice of China influences to motivate students undertaking and continuing their doctoral degrees.

These three main questions were designed to explore this research problem: involving the responsibility of Chinese doctoral supervisors, the daily doctoral practices concentrating on supports students' projects and individual development, and students' motivation. The

detailed discussion was presented for each question in Chapter 7. This section shows the conclusions about the research problem.

Some scholars indicated that the traditional culture, social context and the present policy could influence doctoral supervision culture (Bravo, Saint-Mleux & Dubois 2007; Winchester-Seeto et al. 2014). Due to the influence of traditional culture and policy of China, the results from this research showed that doctoral supervision in the Chinese context has some distinguishing features.

As Chapter 2 and Chapter 3 discussed on the big picture of Chinese context and doctoral supervision, four main aspects regarding cultural custom and policy practice of China could influence doctoral supervision. The four main Chinese backgrounds are *pinde*³², the traditional relationship between teachers/lecturers and students (Confucian culture), the implication of studying, which is derived from the *keju*³³ and now developed to *huji*³⁴ policy, and the graduation relevant policy in the Chinese context.

Due to the influence from these three aspects of culture and policy of China, it is not assumed that the model or theory of doctoral supervision from Western countries can be directly applied in China. There is little existing literature regarding doctoral supervision and how the cultural custom and policy practice of China influence the doctoral supervision in China. Most literature on doctoral education involved only the basic statistical data about current status of doctoral supervision, such as the number of institutions providing doctoral education, and the number of current doctoral supervisors and doctoral candidates in the Chinese context. There is only little existing research explaining why the Chinese doctoral supervision looks like this, and there is little research

³² As chapter 2 introduced, *pinde* (品德) are an individual's stable psychological characteristics and tendencies, which are shown by a series of individual behaviors, according to the codes of conduct of social ethics and morality (He 2011). In the Chinese context, political attitudes and complying with law and legislation belong to one of the psychological characteristics.

³³ As chapter 2 introduced, *keju* are the series of policies and processes of selecting and preparing talented people of government officials through imperial examinations in ancient China (Huang, S 2014; Li, MZ 2016; Liu, H 2008; Zhang, C 2014).

³⁴ As chapter 2 introduced, *huji* policy is an administration policy for the Chinese population. China's present *huji* policy grows out of the previous *keju* policy and the strong Confucianism values.

involving the topic of how the cultural custom and policy practice of China influence doctoral supervision in China. Therefore, for the reasons above, in order to fill in the research gap, this thesis focused on discovering the linking between cultural custom and policy practice of China and doctoral supervision, and the research problem was:

How does the cultural custom and policy practice of China influence the doctoral supervision in the Management discipline in China?

Case studies were chosen for building up a theory of cultural custom of China, involving Confucian cultural background and *pinde*, and policy practice, such as *huji* and the graduation relevant policy practice, of China influencing the process of doctoral supervision the Management discipline in China. The process of doctoral supervision includes daily doctoral practice, supervisors' responsibility, and students' motivations. The data was collected via 39 face-to-face, one-to-one interviews. All interviewees are from three different groups involved in doctoral supervision, namely doctoral supervisors, doctoral graduates, and doctoral students who worked or studied in the Management discipline in a leading Chinese university in Beijing, China.

After the presentation of the results in Chapters 5 and 6, and then discussion in chapter 7, the theory has been built up, it is a Chinese *bentuhua*³⁵ theory, regarding the influence of Chinese cultural custom, focusing more on Confucian culture and *pinde*, and Chinese policy practice including *huji*, and the graduate relevant policy on doctoral supervision. This theory has been displayed by two main models: the model of doctoral supervision (Figure 8.2) within the Chinese context and the model of *pinde* factors in present Chinese academic system are shown in the following.

8.1.1 The model of doctoral supervision in Management in China

The majority of results from this research focusing on the model of doctoral supervision in the Management discipline in China are presented in the following four aspects.

³⁵ As Chapter 1 introduced, the process of combining between Western countries and current existing Chinese problems is called *bentuhua* (本土化) (sinification) in Chinese characters.

Firstly, the data in this research shows that, in China, Chinese doctoral supervisors who worked in Chinese universities need to carry out two principle responsibilities: delivering academic knowledge and skills, and cultivating people.

The knowledge and skills delivery is mainly based on the project-orientation training, which is reflected in the quality of candidates' theses outcomes and candidates' publications which need to satisfy the foundation requirements, such as the number of publications and the requirements about the journal ranking, from the academic departments.

Compared to the supervisors' duty on the knowledge and skills delivery, this research emphasises the other vital duty of cultivating people, which implies that Chinese doctoral supervision pays more much attention to person-orientation training in the Chinese context, even sometimes rather than the knowledge and skills delivery. Although some Western scholars pointed out the doctoral supervisors had the responsibility of providing personal support, such as career support (Collins 2015; Taylor, S & Beasley 2005), this model suggests the contents of person-orientation training are broader than these existing descriptions. This doctoral supervision model draws attention to the fact that in China, the essence and target of doctoral pedagogy are cultivating people's integral *suzhi*³⁶, which is not only limited to professional-orientated knowledge, skills, and working styles as academics and/or professionals. This model emphasised what kind of person the graduate will look like and how to shape the candidates in both professional abilities and *pinde* throughout the process of doctoral supervision in the Chinese context. The results and the conclusion about detailed *pinde* will be further shown in Section 8.1.2.

³⁶ As Chapter 1 introduced, *suzhi* "refers to individuals' quality, which is predetermined by biological inheritance, yet can be molded thereafter by the external environment, postnatal education and training and by practice" (Wang, MM et al. 2014, p. 159).

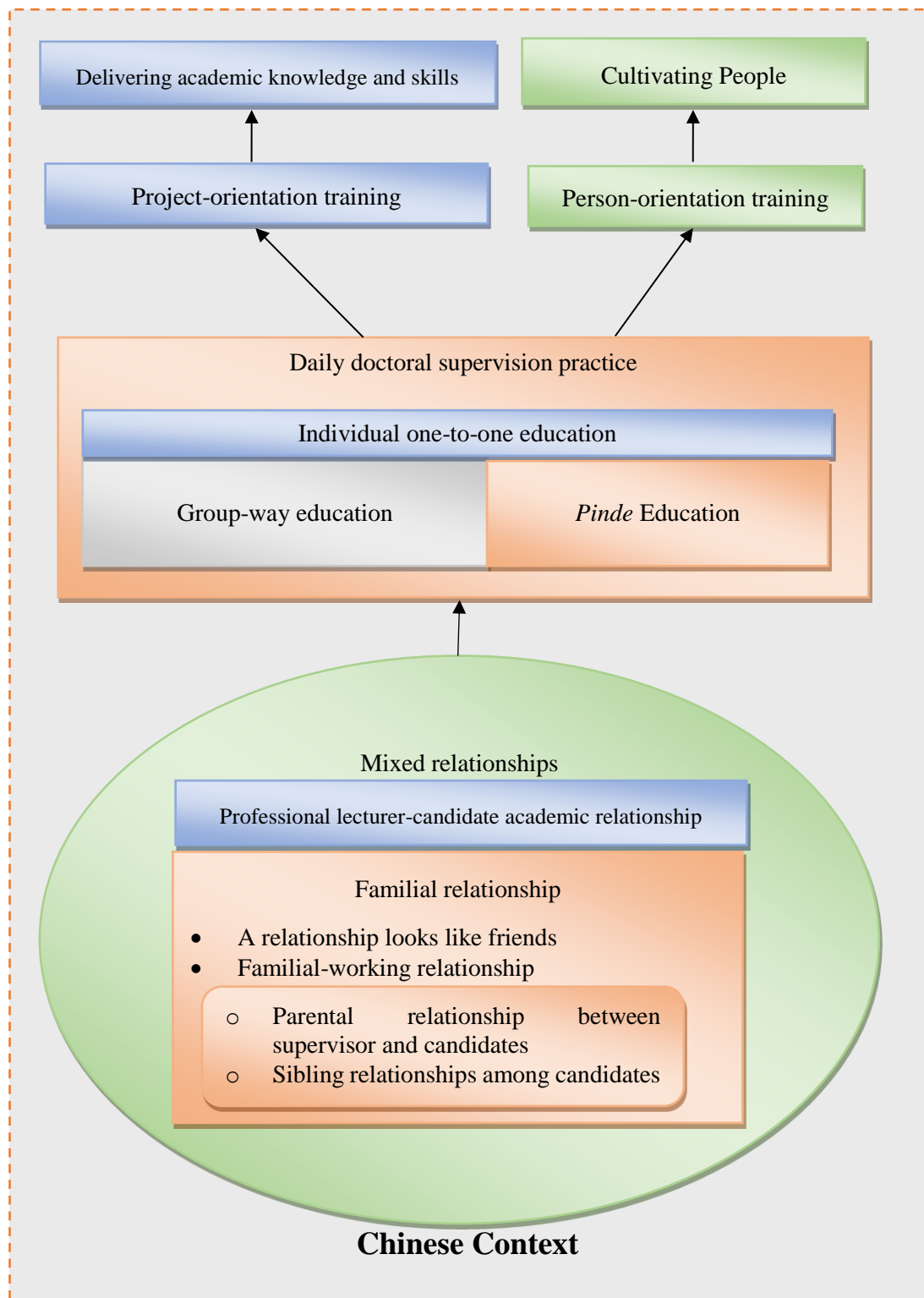


Figure 8.2: The model of doctoral supervision in Management in China

Source: Developed for this research

Annotation Figure 8.2: Time is a dynamic factor to influence each step in this model and in this theory.

Secondly, this research established the approach of doctoral supervision in the Management discipline in China, which is team supervision with only a single doctoral supervisor. This approach effectively explains how the cultural custom and policy practice of China influence the daily doctoral supervision practice in the Management discipline in China. This research points out that in contemporary China, doctoral supervisors provide both one-to-one guide and group-way education. Compared to one-to-one guide based on one-to-one regular meetings, used in the daily doctoral supervision practice, Chinese doctoral supervisors in this research preferred to use the group-way education to support their doctoral candidates. This approach includes regular group-meetings; formal group activities, such as coursework, workshops and seminars, internships and conferences; informal group activities, such as sports and social activities. This study emphasises the advantages of the regular group-meetings in the Management discipline in the Chinese context. The majority of members in the regular group meeting the students who are supervised by the same supervisors, are called *tongmen*³⁷.

The possible reasons for using team supervision with only one principle supervisor in the Management discipline in China are summarised and presented in the three points outlined below.

The first reason for only one supervisor is that group-way education brings many benefits for both doctoral candidates and doctoral supervisors, which is supported by many Western studies, such as reaching the targets on specific research skillsets (Gube et al. 2017), enlarging candidates' social networks (Grant & Pearson 2007; Manathunga 2015; Watt 2016), improving candidates outcomes (Halse 2011; Löfström & Pyhältö 2014; Manathunga 2015) and considering the candidates' life beyond their PhD (Kiley 2014).

The second reason for only one supervisor is that Management, as a popular discipline in China in recent years, emphasises the importance of practicality. The Chinese managers need to recognise the importance of the differences between Western countries and China, which are derived from the differences in personal and social values (Lv 2011), and the significance of the *bentuhua* of Management theories and practical experiences the

³⁷ As Chapter 3 introduced, the PhD students, who are supervised by a same supervisor, are called *tongmen*.

Chinese context. In China, having the title of Doctor could improve people to directly gain higher positions, such as leaders or managers in public services and state-owned enterprises. For example, in 2003, in order to attract graduates with doctoral degrees, who did not necessarily have work experience, the Chinese public services directly recruited nearly 70 doctoral graduates in the important positions as directors (People 2003). Until 2017, the government department in Jiangxi province kept using the similar policy to attract doctoral graduates (Zhu, Y 2017). That implies the doctoral graduates in the Management discipline will possibly directly become the directors/ managers/ leaders in important positions, after they graduate in China. In order to satisfy the expectation from employers, the process of doctoral supervision is important, because the quality of doctoral supervision directly impacts on the graduates' career path and job stability particularly in the Management discipline.

The successful graduates, with the title of Doctor in the Management discipline in the Chinese context, will be considered as the managers and/or leaders in the future. As the leaders of a team in the Chinese context, they are expected to integrate the characteristics of the *suzhi* including good abilities: such as quickly recognising and solving problems, logical thinking, organisation, leading, judgement, and creativity and innovation (Peng, H & Xie 2017; Wang, YJ, Lu & Cui 2015; Yuan 2016), and good *pinde* including caring for people and keeping harmony with colleagues (Hu, Z & Chen 2013; Peng, H & Xie 2017). Singh (2009) pointed out that most Chinese students learning approaches may be following the rule of deference to muted criticisms, which limited the critical thinking ability. However, my data showed that group way is one of the effective supervision approaches to challenge this.

In order to complete the relevant training to be a good leader during the process of doctoral supervision, the group-way education is an effective approach to make the doctoral candidate familiar with the team environment in China. Then each doctoral candidate can effectively develop her/his skills and form individual leadership. Finally the doctoral graduates have been transformed from the dependent candidates to be independent researchers or independent workers as managers with the effective support from the supervisor and other group members.

Pinde education is also an important object embedded in the model of doctoral supervision. This paragraph briefly introduces the necessary of *pinde* education and the approach of how to do *pinde* education. The more information about *pinde* model and the further detailed *pinde* indicators will be shown in Section 8.1.2. Due to influence from the contemporary Chinese social values and the political background in China, having good *pinde* is one of the primary goals expected by employers. Shaping good *pinde* is a necessary responsibility for supervisors and academic institutions. Doctoral supervisors need to observe candidates' behaviours, which is the *pinde*'s extrinsic performance, throughout the daily work and daily life by individual contacts or observation in the group. Once the supervisors found the weak points of candidates' *pinde*, supervisors would help them to improve it. The data in this research showed that supervisors normally used two approaches to shape the candidates' *pinde*: being an example with good *pinde* characteristics, and engaging *pinde* education, such as pointing out students' shortcomings.

The third reason for using group way with one supervisor is that in the data in this research showed that regular group meetings bring benefits for doctoral supervisors as well and overcome the shortcome of lacking doctoral supervisors in the Management discipline. In China, the majority of doctoral supervisors are selected from the group of Professors (国务院学位委员会 1995). Even if some Associate Professors or lecturers could be doctoral supervisors recently, because the policy on the selection criteria of doctoral supervisors changed (Liu, Z 2005), the data from my research showed that the majority of candidates preferred to follow the supervisors with the Title of Professor, who had more experience and were well-resourced. Furthermore, in order to make supervisors' roles and responsibilities clearer, the majority of Chinese academic institutions adopted the One Supervisor Policy, during the whole doctoral candidates learning process (Xu, R 2013). Therefore, China faced the pressure of imbalance of students-faculty ratio, and increased numbers of doctoral candidates within a short time (Xu, R 2013), particularly in the popular Management discipline. In order to avoid the disadvantage of limited time and energy for each doctoral supervisor, regular group-meeting and other group-way education approaches are good to relieve the suffering and save the supervisors' time and energy in the Chinese context.

Therefore, based on the above three reasons, the team supervision of students with one supervisor is suitable for Chinese doctoral education system, particular in the Management discipline.

Thirdly, this research identifies the complex mix of relationships between doctoral supervisors and doctoral candidates, and among doctoral candidates, within the Chinese context. In this research, most Chinese supervisors sustained professional supervisor-student relationship for supporting individual projects, and they remained in familial relationships and carried on familial management system for both project-orientation training and person-orientation training, which is the Chinese distinguishing feature compared to Western countries.

This research emphasised the typical relationship, familial relationships, embedded in the process of Chinese doctoral supervision. The family relationships are reflected in both supervisor-student relationship and student-student (*tongmen*) relationships.

For the supervisor-student relationship, when I collected data by face to face, one to one interviews, one of the deep impressions for me is that all Chinese supervisors' interviewees kept using the words, such as 'my kids', 'my children', to instead of 'my candidates' or 'my students'. Similarly to the perspective from doctoral candidates and doctoral graduates, when they described the relationships with their supervisors, the participants from these two groups felt that supervisors looked like their parents (father or mother), and friends. Therefore, this research confirmed that the parental relationship existed in doctoral supervision in China.

The confirmation of the parental relationship is derived from the influence of the traditional Confucian culture. 'Three Principles and Five Virtues' is the foundation of Confucianism. 'Three Principle', which presents the ethical relations in the ancient China, shows that "ruler guides subject; father guides son; and husband guides wife" (Fu 1997, p.81). Chinese pay much attention to filial piety for their parents (Lin 2016; Wei & Peng 2014). That means father has the maximum authority and gains the greatest respect and obedience from other family members. Furthermore, a famous Chinese proverb explains why teacher-student relationships look this way. This proverb is 'even if he was being your teacher one day, he will be the father for ever for your future life' (Baiké 2018b).

Based on this traditional culture and present social value in China, doctoral supervisors, who are the people working in the honourable profession, are respected by their candidates and others. In my opinion, in the Chinese context, doctoral supervisors, who are regarded as fathers and leaders in their supervision teams, have strong power and authority. However, in order to build up a healthy and equal academic atmosphere and effective balance between authority and autonomy, most experienced supervisors remained in the parental relationship with peers and in a harmonious atmosphere. That was why many participants believed their supervisors looked like their teachers, parents and friends.

This research explored how the parental relationship benefited to protect the formal professional supervisor-candidate relationship and to avoid breaking the academic relationships. This study showed once the parental relationship built up, the strong trust relationship between supervisors and candidates, who are regarded as family members, had been established as well. For my understanding, it is hard to break the relationship with the family members, even if a strong dispute occurs. Therefore, the parental relationship could assist to steady the formal professional supervisor-student relationship during whole doctoral supervision process. This point of view has been supported by my data. All interviewees in my research clearly recognised there was an obvious boundary, when they deal with the relationships involving either academic projects or individual areas, because the parental relationship existed. All interviewees understood that supervisor, as a family member, could be nice and warm as the individual life supporter. However the supervisor could suddenly change face to be strict for issues about students' projects. Because the familial relationship protects invisibly, doctoral candidates in this research understood that the supervisor might be only angry about their work and not crossing to personal matters. Therefore, doctoral supervisors could freely change attitudes on the issues between the academic project and students' individual problems; it is expected and it also would not damage their relationships.

Accompanying the establishing of parental relationships, the application of group-way education, and the familial management concept applied; sibling relationships emerged automatically among candidates who were supervised by a same supervisor (*tongmen*). Based on the influence from the same doctoral supervisor, the impact of the common

social value of *pinde*, and the establishing of sibling relationships, the trust relationship among *tongmen* was built up as well. Similar to the Western studies, my research indicated that *tongmen* as one type of peers provide many contributions such as improving writing skills and publishing skills (Roulston et al. 2016), supporting for solving the specific problems (Devos et al. 2017), enlarging the networks and decreasing isolation (Devos et al. 2017; Guerin, Kerr & Green 2015; Kumar, S & Johnson 2017).

This research further emphasised that time is a dynamic factor to influence each step in this theory during the whole process of doctoral supervision in the Chinese context. As the data showed, time is important to change candidates' responsibilities, roles and their relationships from early stages to end stages. *Tongmen*, as the older sibling in the big family, take more responsibility for looking after their 'young brother' or 'young sister', and play the vital role, such as co-supervisor, according to the entry year of subsequent supervisors. As mentioned in the discussion chapter, during the different stages of the supervision process, the roles of doctoral candidates, particular *tongmen*, changed. Due to the special academic environment which supervisors tried to build up, many *tongmen*, who commenced their PhD early, played informal co-supervisory roles to the *tongmen* who started their PhD later. As the time changed, they grew up from the youngest sibling, who needed to be taken care of by all other *tongmen*, to the eldest who needed to look after other *tongmen*. Accompanied by the role transformation the implied responsibility of *tongmen* also increased. At the same time, *tongmen*'s roles changed from general team members to leaders because during the long procedure of supervisor's projects or group activities, older candidates' graduated and new *tongmen* had to take over the leadership. This process showed that *tongmen* play a significant role in the shaping of doctoral candidates' leadership in the Management discipline. In addition, although it is good to have a 'big sister' or 'big brother' during the whole doctoral supervision process, it does not stop allowing the younger sibling do independent research.

Some studies found that peers could provide only limited influence on the candidates' final outcome. For instance, Devos et al. (2017, p. 73) indicated that "peers have little control over the students' dissertation content. They usually have a limited impact on the students' progress with their work". However, my research gave a different picture on the functions and contributions of peers, particularly *tongmen*. The data from this research

emphasised that *tongmen* provide detailed and private guidance on the theses and publications. In China, there is invisible protection from three aspects:

- special policy that a on doctoral degree could not be granted to the person with bad *pinde*;
- the Chinese characteristic social and cultural background, which is *pinde* education; and
- doctoral supervisors (the example of people with good *pinde* in front of their students) are considered as the best guarantor to avoid plagiarism.

The trust relationship had been established firmly among *tongmen*. Some respondents described that *tongmen*, usually following supervisor's suggestion, shared so many things including all their theses outcomes and relevant materials, even before they submitted their theses. The way of sharing the detailed, deep academic information benefits the new *tongmen*, doing similar research, to save their time and energy. That means this way could increase new *tongmen*'s progress rate, and help them identify quickly their research directions. Therefore, in this study, many interviewees recognised that they could not graduate (including *tongmen* and *non-tongmen*) without peer support.

Finally, this research discovered the linking between the cultural custom and policy practice of China, and doctoral students' motivation of starting their PhD and continuing their doctoral process in the Chinese context. Table 8.1 compares the two types of motivation factors, internal motivation and external motivation, the cultural custom and policy practice of China influence more the external motivation factors as the Table 8.2 shows:

Table 8.1: The types of motivation factors in this research

Internal motivation factors	External motivation factors
<ul style="list-style-type: none"> • Doing PhD linked with career path, such as academic and keeping current position • Improving general <i>suzhi</i> • Being interested in discipline and research topic 	<ul style="list-style-type: none"> • Doing PhD linked with Non-academic career path (good stepping-stone for future career; reduce pressure of finding a job) • For exchanging <i>huji</i> • Enlarging social network • Gaining degree • Satisfying family members' expectations

Source: Developed for this research

Table 8.2: The relevant culture and policy influence external motivation factors

External motivation factors	The relevant culture and policy influences on this factor
Doing PhD linked with Non-academic career path (good stepping-stone for future career; reduce pressure of finding a job)	<ul style="list-style-type: none"> • <i>Huji</i> policy • Government job offers (People 2003; Zhu, Y 2017)
For exchanging <i>huji</i>	<ul style="list-style-type: none"> • <i>Huji</i> Policy • <i>Keju</i> Policy • Relevant policies linked with <i>Huji</i> policy (Hu, X 2014; Wang, Q 2014)
Gaining degree	<ul style="list-style-type: none"> • <i>Keju</i> Policy
Satisfying family members' expectations	<ul style="list-style-type: none"> • <i>Keju</i> Policy • Cultural Revolution (Guo, Z & Beatrice 2008; Lou 2008)

Source: Developed for this research

8.1.2 The *pinde* model

As the model of doctoral supervision in Management in China, this thesis emphasises that *pinde* is a vital factor in China and shaping *pinde* is throughout the whole process of doctoral supervision in the Chinese context.

Linking to the literature on the traditional Chinese culture and the present policy of China, it is not difficult to find reasonable explanations on the significance of people-orientated training during the doctoral supervision in China. The influence from the traditional Confucian culture and the present *pinde* ideology have become the basic principles of Chinese society and government to impact on the people's behaviours in social value system (Durdent & Yang 2006). Chinese society and government emphasised the significance of talented people's *pinde*, and this matches the results in this research that one of the vital duties is cultivating people or shaping candidates' *pinde*.

Having good *pinde* has also been recognised as the one of the vital education targets in every educational phase in contemporary Chinese educational system. The term *pinde* continues to appear in both relevant regulations of Chinese education systems, such as the training targets of Chinese universities for the graduates (Qiu 2013), the criteria regarding talented people evaluation (Li, Z & Li 2014; Peng, M 2011; Qiu 2013), and two main functions of education by Chinese universities (Zhang, W & Yang 2003).

Having good *pinde* is also listed as one of the necessary requirements by the majority of employers for selecting and employing in Chinese labour markets. As Table 2.1 shows, there is a popular ‘rule’ on how to use four types of people: Wiseman, Gentleman, Fool, and Villain in the Chinese context (Fang 2010; Si 959). This rule showed that most Chinese employers preferred to use a Fool, who had no good *pinde* and not enough ability, instead of a Villain, who had bad *pinde* and outstanding ability. It is because even if a Fool could not complete things excellently, they did not bring negative influence for their teams; a Villain had enough abilities to bring negative influences to their teams, organisations and countries. Therefore, the employers needed to use a Villain very carefully (Fang 2010; Si 959). Chinese doctoral graduates are considered as outstanding talented-people, who have priority over than the graduates holding Bachelor degrees and Master degrees to gain preferential opportunities, such as gaining ‘the quota of entering Beijing’ (Zhao, X 2005), obtaining *hujia* in big cities (户籍网 2017), and then getting more relevant entitlements (Wang, Q 2014).

Based on the model of doctoral supervision (Section 8.1.1) emphasises the strategy of adopting the trainings on both project-orientation and person-orientation during the whole doctoral supervision process. The person-orientation training focuses more on shaping the candidates’ *pinde*, which should satisfy and match the requirements from both academic institutions and the expectations from Chinese government and labour markets.

Although many Chinese studies indicated the importance of *pinde* in various fields (Li, Z & Li 2014; Peng, M 2011; Qiu 2013), the majority of these studies and the regulations from the Chinese academic institution and Chinese government only referred to the macro concept of *pinde*. There is no existing research provide the *pinde* model focusing on the detailed indicators in the doctoral level of education field in China.

This research refined a *pinde* model within the academic field, through analysing the initial data, as Table 8.3 shows. As presented in data analysis and discussion chapters, due to the importance of *pinde* within the Chinese context introduced in Chapter 2, *pinde* is an implied standard to restrict the negative behaviours for both doctoral supervisors and candidates during the whole doctoral supervision process. *Pinde* also shows the kind of person excepting professional knowledge and skill.

The data from data analysis chapters showed only two main layers of *pinde*; they are: having professional academic attitudes and showing social ethics within the Chinese context. However due to the political influence and guidance the core values from Marxism theory in China, having appropriate political attitudes and complying with law and legislation have become the implicit and vital factor in regards to doctoral education. This factor is not be stated by the interviewees perhaps because all interviewees believed Chinese already knew it and it was not necessary to speak out about it. In fact, having appropriate political attitudes and complying with law and legislation had become one of the necessary requirements for both obtaining a PhD offer and gaining a doctorate degree. Therefore, I put this element in one of *pinde* layer in this theory. The layer of having appropriate political attitudes and complying with law and legislation includes three elements: upholding the leadership of CCP, supporting the CCP's socialism system, and complying with Chinese law and legislation. The level of professional academic attitudes in Chinese academic area, particularly in the doctoral educational level comprise seven aspects: responsibility, caring for peers, rigor, tolerance and broadmindedness, honesty, diligence, and willingness to share research. The third level of *pinde* is showing social ethics, which consists of the factors of not being too materialistic, being charitable and just.

Table 8.3: *Pinde* factors in present Chinese academic system

Level 1 <i>pinde</i> factors	Level 2 <i>pinde</i> factors
Having appropriate political attitudes and complying with law and legislation	Upholding the leadership of Chinese CCP
	Supporting the CCP's socialism system
	Complying with law and legislation
Having professional academic attitudes	Responsibility
	Care for students/peers
	Rigor
	Tolerance and broadmindedness
	Honesty
	Diligence
	Sharing resources
Showing social ethics	Not being too materialistic
	Charitable
	Just
	Modest

Source: Developed for this research

8.1.3 Summary of the theory

The results from this research focus on refining a theory regarding doctoral supervision influenced by the cultural custom and policy practice of China. This theory includes two models: the model of doctoral supervision in Management in China, and *pinde* model. This theory is summarised and presented in the following points:

- In contemporary China, the team supervision with one supervisor can be successfully used in the Management discipline (the social science area) in China.
- This theory ensures that Chinese doctoral supervisors satisfy two principle responsibilities: delivering academic knowledge and skills, and cultivating people focused on *pinde* education.
- This theory emphasises that Chinese pay much attention to the importance of person-orientation training, which is similar to or even rather than project-orientation training during the process doctoral supervision.
- Supervisors provide both one-to-one guide and group-way education. In order to offer effective training for candidates, particularly in the Management discipline, Chinese doctoral supervisors emphasised group-way education and *pinde* education targeting to effectively perform their duties.
- This research identifies the complex mix of relationships between doctoral supervisors and doctoral candidates, and among doctoral candidates within the Chinese context. Familial relationships have been verified to exist between supervisors and students or among *tongmen*, in the doctoral education in China, and offer the evidence that these relationships benefit to maintain the professional relationships during whole doctoral supervision process.
- Doctoral supervisors carried on familial management system for personal-orientation training, which is the Chinese distinguishing feature compared to Western countries.
- This theory also provides some different approaches for supervising various doctoral students in the Management discipline in China.
- *Pinde* looks like an invisible hand to restrict both supervisors' and candidates' negative behaviours, and *pinde* is the guarantee of successful supervision performance within the Chinese context. That might a reasonable explanation why, based on the influence of *pinde*, there is no need to have ethics committees in Chinese

academic institutions. This research also presented a pinde model within the academic doctoral field in the Management discipline in China.

8.2 Implications for theory, policy, and practice

8.2.1 What could China learn from this research?

This theory brings the following implications for China for different types of people or institutions.

Firstly, for the doctoral candidates who studied in the Chinese context, this research benefits the Chinese doctoral students to get the big picture of doctoral supervision. Then before the doctoral students graduated, they might have the integral understanding on what the doctoral training targets are. What does the whole process of doctoral supervision look like? Why do the supervisors like this way? What they need to pay attention to during their current stage which might be influential in their career path in the future. Understanding the big picture of doctoral supervision benefits doctoral candidates to gain from more and reduce the isolated feelings within their limited learning period.

Secondly, for the doctoral supervisors who worked in China or who worked with Chinese academics, this research showed the benefits from a refined model of doctoral supervision in the Management in China: team supervision with one principal supervisor. The benefits for these supervisors include: saving the time and energy; shaping well the supervisor's individual working and leadership style in the Chinese context; learning Chinese candidates' potential expectations and demands beyond the PhD life; clearing the supervisors' responsibilities in the Chinese context; understanding candidates' motivations; effectively performing supervisors' duties which are assisting candidates to grow up to independent researchers or to the leaders /managers; effective building up the trust relationship with candidates and learning how to support the students; building the multivariate relationships which benefits the whole supervision process: and providing suggestions of how to supervise different types of doctoral candidates in China.

Thirdly, this research also indicates some benefits for Chinese academic institutions, and Chinese government. This study emphasises that *pinde* education are paid much attention, and familial relationships exist in the doctoral level education. Moreover, this research effectively links the doctoral supervision, and Chinese culture and Chinese present policies. For example, the *huji* policy and relevant policy linking with *huji* stimulate some people to start their PhD and continue their projects. Due to confirmation of the influence of Chinese cultural custom and policy practice on doctoral supervision in this research, Chinese government and Chinese academic institutions might effectively formulate the relevant policies which could directly impact on the education trends in China.

Finally, this research provides information to Chinese people who are interested in international doctoral supervision, which has been reviewed in Chapter 3.

8.2.2 What could Western countries learn from this research?

The findings from this research also benefit for Western countries as follows:

- This research reviewed the literature on the traditional Chinese culture and current Chinese policy, linked with the Chinese education system. Faced by the huge number of Chinese international students in recent years, this research provides to readers, such as academics, education policy makers and financial contributors who are interested in Chinese culture and the development of contemporary China, a big picture of what Chinese doctoral education and Chinese culture looks like. The results further show to the Western academics why the students or colleague who are from China, like working or studying in these ways. In addition, this thesis also provides to the Western academics the potential information regarding what kind of graduates might be suitable for their future career path within the Chinese context.
- This research built up a theory of the influence of cultural custom, such as Confucian cultural background and *pinde* education, and policy practice of China, such as *huji* policy and the graduation relevant policy, on the process of doctoral supervision including in doctoral supervisors' responsibility, daily doctoral practice and students' motivations. This theory composes by two models: the model of doctoral supervision in Management in China and *pinde* model.

- This research built up a model of doctoral supervision: team supervision with only one supervisor, and this model showed to the Western academics how the group education was successfully applied in the process of Chinese doctoral supervision in one of the Social Science areas, the Management discipline, and how Chinese supervisors deal with the relationships with their candidates. The results from this research may assist the Western academics to dig out the implied and important factors which hide in the Chinese social background.
- Although the culture and policy are different between Western countries and China, the model of group supervision with only one principle supervisor can successfully be used in this research in the Management discipline. This model may be applied in the Social Science area in Western countries as well.
- This research showed the clear definition on *pinde*. Even if many researchers translated this term of *pinde* to ‘morality’ in English, however, I found the meanings are not equal between *pinde* and morality. So this research cleared conceptions on this word. Furthermore, this research showed the readers, who are interested in people-training, a model of *pinde* at the doctoral level in the Management discipline in China.
- In China, there are no ethics committees in Chinese academic institutions. This research also showed the Western readers one way of how to collect the data as a researcher in the Chinese context.

8.2.3 Contributions

To sum up, this research presents the five main theoretical contributions of this research and its implications for policy and practices. Firstly, this research fills in knowledge gaps in doctoral supervision in China. Although there are many studies on doctoral supervision in Western countries (Askew et al. 2016; Collins 2015; Maxwell & Smyth 2011; Waghid 2006; Watt 2016; Watts 2008), and some research on Chinese education in different education levels in China, such as primary schools and seniors schools, the research on doctoral supervision is not developed. Due to the influences of cultural custom and policy practice of China, this research establishes a theory related to Chinese doctoral supervision which focuses on two main traditional duties: delivering academic knowledge and skills, and cultivating people focusing on shaping individual *pinde*. Compared to doctoral supervision in Western literature, this theory emphasises more the cultivating of

people, such as the importance of *pinde* education similar or even rather than academic knowledge and skill delivery in China. These findings are consistent to the traditional Chinese culture, social values and the government registration on national ethics.

Secondly, aimed to the two main targets, this study indicated that doctoral supervisors mainly used a team supervision with only one principle supervisor in the Management discipline in China. This approach derived from the lab group model (Guerin, Kerr & Green 2015), and most traditional lab models are used in the Science areas (Guerin, Kerr & Green 2015; Hum 2015). This research proves that the approach of team supervision with one supervisor can be successfully applied in the Social Science areas, particularly in the Management area in the Chinese context.

Thirdly, this research contributes to the literature regarding the Management field. There is a shortage of literature on post-graduation education in Management, especially in China. Compared to other disciplines, more doctoral graduates in the Management discipline prefer to find jobs in enterprises and government institutions rather than only focusing on research and academic institutions. As Chapter 2 indicated the title of Doctor makes these graduates more competitive to obtain positions as managers. Therefore, the results from this thesis help the development of doctoral supervision in the Management field, and how to cultivate successful graduates, who will work as either academics or non-academics, in the Management discipline.

The fourth contribution of this study is that its findings might be applied to other Asian countries, such as Malaysia, Thailand or Japan, where those counties have similar culture and social values to China.

Finally, although the requirements of doctoral degree's granting are the same to every candidate, this research found that most doctoral supervisors used different ways to supervise the candidates who had different career targets and motivations. For the candidates whose internal motivation plays guiding roles (they usually are full-time young candidates, and they expect to be academics in the future), supervisors focus more on person-orientation training and provide more chances for them to join relevant workshops, seminars, academic conferences, participate in research projects, and be the academic staff such as research assistant, and encourage them to produce more outcomes.

In contrast, for the candidates whose external motivation is in the leading position (they are generally in the part-time, older students' group, they won't expect to be academics in their career path, and their *pinde* had been shaped well), supervisors focus more on project-orientation training, and need to offer more opportunities relating to supervisors' demands and career path, such as providing internships chances.

8.3 Delimitations

Similarity to any research, several delimitations, which may potentially affect the final findings and conclusions, exist in this research, because of the influences of limited resources, time and research funding. This section displays the limitation of this research.

Firstly, this research focused only on collecting data from people who are studying or working in the Management discipline during the doctoral supervision process in China. Therefore, this investigation is not tailored to the students, doctoral graduates and supervisors in all kinds of disciplines in China. Due to this limitation, the findings and conclusions may not be suitable for the supervision process in different disciplines.

Secondly, the investigation was based only on a leading Chinese university in Beijing, even if this university is well-developed sample for leading the way for other universities in China. This research is not focused on most staff and students involved in the supervision in the universities with general Level Project 211 and general Project 985 universities. Due to this limitation, the findings and conclusions may not fit for universities that are different in Project Level and location.

Thirdly, this research revealed only what detailed factors related to three main elements: conditions related to doctoral supervisors, factors related to doctoral students, the other factors in the academic environment, and how does the cultural custom and policy practice influence doctoral supervision in the Management discipline in China. In fact, there might be some other factors affecting the process of doctoral supervision in China; however this research is more focused on the factors which are more conveniently arranged and more easily applied by doctoral supervisors.

However, although this research focuses on discussion of how the cultural custom and policy practice of China influence doctoral supervision, based on the data from a leading Chinese university in the Management discipline, due to the leader function of this top university in China, most Chinese universities in the groups of Project 985 and Project 211 would like to imitate the Chinese leader university's successful pattern for improving their education quality. Therefore, the results from this research may be broadly applied to different levels of Chinese universities and the supervision pattern may have broad use for supervising the candidates who prefer to work at universities influenced by Chinese culture. Further research is expected to overcome the disadvantages, and the results of this research might be used as a foundation for the further research.

8.4 Implications for future research

Based on the limitations in this research mentioned above, in order to complete the doctoral supervision theory and practices in universities, this section provides suggestions for future research.

Firstly, this research is focused on exploring how the cultural custom and policy practice of China influence doctoral supervision in the Management discipline. However, most of disciplines in Art and Social Science have similar supervision processes, so the results in this research for the doctoral supervision could perhaps be used in different disciplines in China, such as Education, Economic, Business, and IT engineers. Therefore, further research could focus on different disciplines.

Secondly, as mentioned in Chapter 2, the levels of Chinese instruction are divided into four levels: top Chinese universities, Project 985, Project 211 and other levels universities. The data in this research is derived from one of the top Chinese universities. That means these universities have more abundant-funding, resources, better studying environment and more experts and professional academic staff with higher reputations. Similarly to this Case University, most doctoral supervisors with highest reputations work in other top universities or in Project 985 universities. Therefore, further research could concentrate on testing whether this theory or the results in this research could be used in other levels

universities (such as Project 985 universities, Project 211 universities or other universities).

Thirdly, this research shows how the cultural custom and policy practice influence doctoral supervision, involving three principle factors, in the Management discipline in China. The importance of these three principle factors has been discussed. This research is not focused on how the culture and policy of China influence other factors, which are not introduced in this research, so these factors could be used in further research.

Finally, similar research regarding doctoral supervision in other countries, such as Australia, England, United States of America, and Germany has been undertaken. Culture is a vital factor to influence doctoral supervision, so further research could perhaps pay attention to how the results in this research work in other countries, particularly Asian countries.

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APPENDICES

Appendix 1

INFORMATION LETTER



Dear Deputy Vice-Chancellor of Research (DVCR):

My name is Ying Zhang, a part-time PhD candidate at the Australian National University (ANU); my current research involves an investigation on the characteristics of effective doctoral supervisors in Management in China. I am also undertaking full-time work (Postdoctoral position) for Professor Mingzheng Xiao at this Case University. I would very much like to undertake my data collection at this Case University in the Faculty of Management and I am seeking your approval to undertake the research. The following gives an outline of this project.

This research will be carried out through individual interviews at this Case University. Ying Zhang will interview total up to 60 doctoral supervisors (n=20), current doctoral students (n=20), and successful doctoral graduates (n=20) who are currently working or studying in Management in your university. The volunteer interviewees will be chosen in terms of the related criteria and suggestions from the related department in your organisation.

The participants may voluntarily take part in this investigation. If the people decide to participate this interview, that will last around one hour, the researcher will send an interview information sheet and a list of interview questions to potential interviewees by e-mail or Fax. An interview consent form will also be signed by interviewee before the interview. The interviewees can withdraw from the research project at any stage without offering any reason, and once the interviewees withdraw from this interview, the information from this interview will not be used by the project.

The purpose of this investigation only is used in the PhD thesis, without any other purpose. The analysis of the information gained during this research project may be published in academic journal or books, the related interviewees' real name, position title and the

department or the organisation will not be used in relation to any of the information. All collected data from this investigation will be stored by the research and her supervisors in a locked cabinet in office at the Centre for Educational Development and Academic (CEDAM) at ANU and the electronic files will also be saved on a computer with password protection for five years. All of the data will be destroyed, when it beyond the limited protection period.

If you have any questions about this study or investigation, you can directly contact with my supervisor or the researcher via email or phone:

Supervisor Details

Dr Margaret Kiley
Senior Lecturer
CEDAM
Australian National University
Phone: 0061-2 6125 2690
Email: Margaret.Kiley@anu.edu.au

Dr Mingzheng Xiao
Professor
School of Government
Case University
Phone: 0011- 8610- 62754635

Researcher Details

Ms Ying Zhang
PhD candidate
CEDAM
Australian National University
Phone: 0061-431157294
Email: zhangyingying@anu.edu.au

I would be very happy to provide you with a summary of the outcomes of this study if you felt that it would be of interest.

Your approval to undertake the research is a requirement of the ANU Ethics Committee which is approving all aspects of this project. If you have any complaints or reservations about any ethical aspect of your participation in this research, please contact:

The Secretary, Human Ethics Research Committee
Research Office, Australian National University
ACT, 0200, Australia
Phone: +61 (2) 6125 7945
Email: Human.Ethics. Officer@anu.edu.au

All complaints you make will be treated in confidence and investigated, and you will be informed of the outcome.

I look forward to receiving your approval to undertake the research, particularly

Ying Zhang
CEDAM
Australian National University
Phone: 0061-431157294
Email: zhangyingying@anu.edu.au

Appendix 2

PERMISSION AGREEMENT

I hereby acknowledge that I have the right to grant the permission requested in this agreement. I have read the information above and I hereby grant to Ying Zhang collect data for her project in this University.

Name of Deputy Vice-Chancellor of Research (DVCR):

Signature of DVCR: _____

Date: _____

I certify that the terms of the permission agreement have been verbally explained to the DCVR and that the DCVR appears to understand the terms prior to signing the form.

Proper arrangements have been made for an interpreter where English is not the DCVR's first language.

Name and Contact Detail of Witness:

Signature of Witness: _____

Date: _____

Appendix 3



Interview Information Letter

Dear Colleague

This project has been designed to explore the characteristics of effective doctoral supervisors, explain how supervisors use effective approaches to supervision, and how a person learns to become a good supervisor in Management in the Chinese context. This research is being undertaken by the researcher, Ying Zhang, who is a PhD candidate at Australia National University (ANU) in Australia, and is undertaking this research at this Case University.

Why am I carrying out this research?

In China, with the rapid increase in the number of doctoral students and shortage of effective doctoral supervisors, some problems have appeared in the doctoral system, such as overly long time to degree, and increase of low completion percentage. So in order to address the pressure of a shortage of qualified doctoral supervisors, research about the characteristics of effective doctoral supervisor is critically important in current China. The purposes of this research are to explore the characteristics of effective doctoral supervisors in Management in China; to help Chinese doctoral supervisors or the people who are preparing to become doctoral supervisors to improve their approaches to supervising their students; and may also help doctoral candidates to seek better approaches to improve their study skills in the doctoral program.

It is anticipated that the results of this research will make contributions to both literature and practice on doctoral supervision, especially in the Chinese context.

What does the research involve?

This research involves in depth interviews at a Case University. The related department from this Case University suggested that you might be a good person to approach, because you have good knowledge, experience and practice on doctoral education. So you are invited to participate in this interview.

I will conduct the interviews and your participation is purely voluntary. No financial remuneration or incentive will be offered for taking part in this research. It will take you approximately one hour to complete this interview. The interview will be recorded by digital recorder, after I obtain your permission. You may withdraw from participation in the project at any time, and you do not need to provide a reason for doing so. If you withdraw from this interview, none of the information you provided will be used without your permission. The analysis of all the interviews will be used for my PhD thesis and some of the results may be published in academic journals or books. Your name, your position titles, and organisations will not be reported unless you have explicitly requested to be identified. All of data from the study will be securely stored.

Are there any risks for you?

I do not intend to seek any information from you which is particularly sensitive or confidential.

Consent form

There is another paper, called a 'Consent Form'. It provides more detailed information about the process of the interview. If you decide to participate, please sign the consent form, prior to interview.

Contact names and phone numbers

The interview questions have been overseen by Dr Margaret Kiley, Ms Margot Person, and Professor Mingzheng Xiao. If you have any questions about this study or survey, you can directly contact me or the supervisors via email or phone. If you are interested in feedback from this study, you can email Ms Ying Zhang at the email address below to get a copy of the results and I will send a brief report.

The ethical aspects of this study have been approved by the Australian National University Human Research Ethics Committee. The Approval Number is 2010/064. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact :

The Secretary, Human Ethics Research Committee

Research Office, Australian National University

ACT, 0200, Australia

Phone: +61 (2) 6125 7945

Email: Human.Ethics.Officer@anu.edu.au

All complaints you make will be treated in confidence and investigated, and you will be informed of the outcome.

Best regards,

Ms Ying Zhang

PhD candidate

CEDAM

Australian National University

Phone: 0431157294

Email: zhangyingying@anu.edu.au

Dr Margaret Kiley

Senior Lecturer

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Professor Mingzheng Xiao

Professor

School of Government

Case University

Phone : 0011-8610-62754635

Appendix 4



INTERVIEW CONSENT FORM

If you consent the following statement, please tick in front of the statement

- ☐ 1. I..... (Please print) consent to take part in the Characteristics of effective doctoral supervisors in Management in China Research Project. I have read the information sheet for this project and understand its contents. The information offered explains the nature and purpose of this research project, so far as it affects me, and is fully explained to my satisfaction by the researcher. My consent is freely given.
- ☐ 2. I understand that if I agree to take part in this research project, I will be asked to voluntarily attend an interview, which will last around one hour. For effective preparation for this interview, and offering the real and effective knowledge, experience and practice on doctoral supervision, I will send a list of interview questions, which will indicate the issues to be discussed.
- ☐ 3. I understand that while the analysis of the information gained during the research project may be published in academic journals or books, my name, position title and organisation will not be used in relation to any of the information.
- ☐ 4. I understand that any personal, sensitive or potentially incriminating information, such as my name and work contact details, will be kept confidential so far as the law allows. This form and other data collected throughout the procedure of interview will be stored separately in a locked office at the Australian National University.
- ☐ 5. I understand that although any comments I make will not be attributed to me in any report or publication without my written consent; it is possible that others may guess the source of information, and I should avoid disclosing information to the researchers which is of confidential status within government or which is defamatory of any person.
- ☐ 6. I understand that I may withdraw from the research project at any stage, without providing any reason and that will not have any adverse consequences for me. If I withdraw, the information I provide will not be used by the project without my special permission.

-
- ☐ 7. I consent to this interview being recorded by the interviewer. I understand that the electronic files and tape recording will be separated saved on a computer with password protection by Ying Zhang for five years, then the data will be destroyed.

Signed.....

Date.....

Researcher to Complete

I, Ying Zhang, certify that I have explained the nature and procedures of the research project to and consider that she/ he understands what is involved.

Signed.....

Date.....

Appendix 5

Part A Supervisor Interview Question

Section One: Profile of doctoral supervisor

Can you tell me of your educational background and some information about your current normal job position, as an educator of doctoral level students?

For example:

What is your research interest?

What is your normal job? (What course do you teach?)

How long have you worked in the management discipline at this Case University? Have you worked in other institutions?

How long have you been a doctoral supervisor?

How many graduates have you supervised to completion?

How many doctoral students are you supervising now?

Section Two: The outcomes a PhD program?

1. What do you think the purpose of the PhD is?
2. Which three most important capabilities do you think PhD students should gain from a PhD program? Why do you think these capabilities are important? How can you help your students to develop these capabilities?
3. Do you think are the three most important capabilities that the employers want? Why?
4. How do you work with your students to improve these capabilities? Why?
5. What do you gain from supervising PhD students?

Section Three: How do you supervise your doctoral candidates at this Case University?

1. What sorts of responsibilities do you have, as a doctoral supervisor at this Case University? Is it same as in other institutions that you worked before? If no, what different?
2. How do you supervise your doctoral candidates?
For example: Would you mind explaining how you supervise your doctoral candidate, following aspects:

How to guide their research project?

- ◆ *Is it your preferred way, or the way you have to do?*
 - *If it is preferred way, why do you think it is a good way;*
 - *If it is the way supervisors have to do, what it is your preferred way to supervise your students? Why did you do not use your preferred way?*
- ◆ *How much expertise do you think a supervisor should have in the student's area of interest?*
- ◆ *What do you do when you think that a student won't complete? Why?*

What sort of relationship do you have with your doctoral students? How do you develop this relationship with your doctoral candidates?

- ◆ *Is it your preferred way?*
 - *If yes, why do you think it is a good way;*
 - *If no, what it is your preferred relationship with your students? Why do you keep the current relationship?*

As a supervisor, what are the three most critical capabilities you think you should develop your students? How do you help them to develop these capabilities?

3. What has been the main influence on you to supervise the way that you do? (What makes you supervise as the way you do?) Why?
4. Did you have any formal preparation to become a doctoral supervisor? If yes, please tell me something about it.
5. What other influences on you to supervise your students this way? Why?
6. What do you obtain from been a doctoral supervisor?

Section Four: What is your experience and practice, as a PhD student?

Please thinking back to when you were a PhD student:

- 1、 Why did you want to do a PhD?
- 2、 What do you think you gained from doing your PhD?
- 3、 Are there any significant differences between your own experience as a PhD student and the experience which you hope that your own students will have?
 - ◆ If yes, what is it? Do you think it takes the big influence to you? Why?
- 4、 Did you mainly gain the knowledge from your doctoral supervisor when you were a PhD student? Who else (such as your classmates and the staff who work in library) gave you particular help in your PhD program? Why do you think it was important to you?
- 5、 What do you think are the criteria of a good supervisor? Why?

Part B Current doctoral student Interview Question

Section one: Profile of doctoral student

1. Can you tell me of your educational background and some information about your current study?

For example:

What is your major?

What is your normal job? (Do you need to attend any class or have any course to teach?)

How long have you worked or studied in management discipline?

Have you been involved in the program of supervising doctoral candidate?

Section Two: What is your experience and practice, as a PhD candidate?

1. Why did you want to do a PhD?

2. How does your supervisor supervise you?

How does your supervisor guide your research project?

◆ *Is it your preferred way?*

- *If yes, why do you think it is a good way for you;*
- *If no, what it is your preferred way of being supervised? Why?*
- *What sort of relationship do you have with your supervisor? How has your supervisor develop this relationship with you?*

◆ *Is it your preferred relationship?*

- *If yes, why do you think it is a preferred relationship;*
- *If no, what it is the relationship you would prefer? Why do you keep the current relationship?*

As a PhD student, what are the three most critical capabilities you think you should have?

How does your supervisor help you to develop these capabilities?

3. Are you mainly gaining the knowledge from your doctoral supervisor, as a PhD student? Who else (such as your classmates and the staff who work in library) give you help in your PhD program? Why do you think it is important to you?

4. What do you think are criteria of a good supervisor? Why?

Section Three: The outcomes a PhD program

1. What is your purpose in doing a PhD?
2. Which three most important capabilities do you think PhD students should gain from a PhD program? Why do you think the capabilities are important? How does your supervisor help you to develop these skills for you?
3. What do you think are the three important capabilities that employers want? Why?

Part C Successful doctoral graduates (Postdoctoral Fellow)

Interview Questions

Section one: Profile of postdoctoral fellow

Can you tell me of your educational background and some information about your current normal job position, as a postdoctoral fellow?

For example:

What is your major?

What is your normal job? (What course do you teach? The current project is very close to your doctor degree or your PhD project?)

How long have you worked in the management discipline?

Have you been involved in a program of supervising doctoral candidate?

Section Two: The outcomes a PhD program?

1. What do you think the purpose of a PhD is?
2. Which three most important capabilities do you think PhD students should gain from PhD programs? Why do you think these capabilities are important? How did your supervisor help you to develop these capabilities?
3. What are the three important capabilities that you think employers want? Why?

Section three: What was your experience and practice, as a PhD student?

1. Why did you want to do a PhD?
2. What do you think you gained from doing your PhD?
3. How did your supervisor supervise you?

How did your supervisor guide your research project?

◆ *Is it your preferred way?*

- *If yes, why do you think it was a good way for you;*
- *If no, what it is your preferred way been supervised? Why?*

What sort of relationship did you have with your supervisor? How did your supervisor develop this relationship with you?

-
- ◆ *Is it your preferred relationship?*
 - *If yes, why do you think it is a preferred relationship;*
 - *If no, what is your preferred relationship? Why do you keep the current relationship?*

*As a PhD graduate, what are the three most critical capabilities you think you should have?
How did your supervisor help you to develop these capabilities?*

4. Did you mainly gain the knowledge from your doctoral supervisor, when you were a PhD student? Who else (such as your classmates and the staff who work in library) gave you help in your PhD program? Why do you think it is important to you?
5. What do you think are the criteria of a good supervisor? Why?

Appendix 6

Appendix 6-1: Meeting styles (√) and ideal meeting styles (○) in PhD process

Respondents	Group meetings	Individual regular meetings	Irregular meetings
1A	√		√
1B	√		√
1C	√		√
1D	√		√
1E	√		√
1F			√
1G	√		√
1H	√		√
1I	√		√
1J			√
1K	√	√	
2A	√	√	√ ○
2B	√	○(Supervisor organised)	√
2C	√		√ ○
2D		√ ○	
2E	√	√ ○	√
2F	√		○
2G			√ ○
2H			√ ○
2I	√ ○(Small)		
2J			√ ○
2K			√ ○
2L	√	○	√ ○
2M			√ ○
2N			√ ○
2O			○
2P	○	√ ○	√ ○
3A		√ ○	
3B		√ ○	
3C		√	√
3D	√		√ ○
3E			√ ○
3F		√	○
3G		√ ○	√
3H	√ ○		
3I	√ ○		√ ○
3J			√ ○
3K	√	○	√
3L		○	√

Appendix 6-2: The comments on group activities

The types of group activities	Respondents
Joining reading groups or discussion groups	1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J, 1K, 2G, 2M, 2O, 2P, 3A, 3C, 3F, 3I, 3J
Attending workshop and seminars	1D, 1F, 1I, 1H, 2O, 3A, 3F, 3I, 3J
Joining <i>tongmen</i> social activities	1C, 1D, 1E, 1F, 1H, 1I, 2F, 3I, 3J,
Participating in student associations	1A, 1B, 2P

Appendix 6-3: The types of internships

Internships types	Frequency of Comments	Respondents
Working in public service	10	1A, 1C, 1F, 1I, 2D, 2M, 3D, 3F, 3K, 3I
Being a research assistant	10	1A, 1C, 1F, 1G, 1I, 2A, 3D 3F, 3G, 3K
Teaching courses	12	1G, 1I, 2A, 2D, 2E, 2H, 2I, 2K, 2P, 3D, 3F, 3K

Appendix 6-4: Codes related to how student motivation factors influence supervisory process

Motivation factors	Coded	Frequency of comments	Numbers of respondents	Respondents
Positive motivation factor	Interesting in research topic	18	15	1A, 1F, 1I, 1K, 2D, 2E, 2H, 2M, 2N, 2P, 3E, 3F, 3G, 3J, 3L
	Improving of professional knowledge and skills	12	10	1A, 2A, 2B, 2G, 2K, 2I, 2P, 3F, 3H, 3I
	Requirement of career developing as an academic or satisfying the current position requirement	24	19	1A, 1C, 1D, 1F, 1G, 1H, 1I, 1J, 2C, 2E, 2F, 2M, 3B, 3C, 3D, 3F, 3I, 3K, 3L
Negative motivation factors	Reducing employment pressure or gaining more opportunity to find non-academic job	23	17	1F, 1G, 1J, 1K, 2B, 2D, 2E, 2G, 2K, 2L, 2N, 2O, 2P, 3F, 3H, 3I, 3L
	Gaining Beijing <i>huji</i>	11	7	1G, 1J, 1K, 2D, 2N, 3A, 3G
	other motivation factors	3	3	2I, 2M, 2N

Appendix 7

Appendix 7-1: Typical comments on four functions of group meeting

Functions of group meeting	Respondents	Typical Comments
Problem-solving	1A, 2I, 2M, 3H	<p>e.g.: “A process of problem-solving via discussion by all group members benefits all participants to improve their academic ability”. (2I)</p> <p>e.g.: “A process providing comments for students’ articles or chapter drafts is an effective learning process for participants” (2M).</p> <p>e.g.: supervisor helps students to solve their problems via group meetings. That is an interactive discussion process to solve problems for different students via group meeting (3H).</p>
Monitoring individual theses’ process	1A, 2J, 2L, 2P	<p>e.g.: 2I and 2L’s supervisors would ask every participant: what they did and what problems they had so far? Supervisors would assign more time to the students with urgent needs in group meeting. (2I and 2L)</p>
Sharing general information	1A, 2J, 3H	<p>e.g.: “The information includes popular research trends, conference information, university notices” (2I).</p> <p>e.g.: “My supervisor transmits the latest news about relevant academic areas and industry fields, such as hot topics, conference information, and the development of industry’s trends (employment trends)” (3H).</p>
Monitoring supervisor’s projects’ process	1G, 2I, 2L, 3H, 3K	<p>e.g.: Group meeting is the best way for supervisors to assign tasks (Respondents 2I and 2P), monitor projects’ processes (Respondents 2I, 2L and 2P), and motivate students to work harder to complete their projects’ tasks (2L).</p> <p>e.g.: “he [my supervisor] could arrange and control these projects’ processes including a process of application, task allocation and projects’ operation through our reporting in a group meeting every week” (3H).</p> <p>e.g.: “We needed to report our working process including what we did, what problems we had [in a group meeting] ... Supervisor provided the final problem-solving ways [after discussion] and assigned tasks for the next week” (3K).</p>

Appendix 7-2: the advantages and disadvantages of meeting styles

Meeting types	Advantages	Disadvantages
Group meetings	<ul style="list-style-type: none"> ● Improving students' knowledge and ability (1A,1B, 1H,1G, 2M, 2D, 3K) e.g.: "Students can learn lots of things from listening to the conversion from other students, who are in the next stage of PhD progress" (1G). e.g.: "the observation process on solving problems by other students is the best way to learn" (2M). e.g.: "the ideas shown in group meeting for a project gave me a start to select my research topic" (3K). ● Benefiting students to feel fairly treated via peers' doctoral progresses (1G) e.g.: "The students can learn how I supervise other students and they feel fairly treated, because I am strict with every student" (1G). ● Motivating students to work hard (1C,1G, 3H, 3I,3K) e.g.: "Supervisors need to know what students do regularly. Group meetings are a good way to learn students' information and motivate them to work hard regularly" (1C). e.g.: "If a student cannot achieve tasks, I am angry to him in front of all people in the group meeting to motivate this student to work harder. Then I will let student know later that I am angry only for this action" (1G). e.g.: "group meeting is an absolutely effective approach to promote students to complete their PhD on time and also monitor students to effectively carry out the supervisor's projects' process" (3H). e.g.: "In fact, even if I did not achieve my target tasks, which I mentioned in last group meeting, and my supervisor did not blame me, I still felt anxious myself about the delay". When I saw him [my supervisor] and if I did not do anything, I would feel uncomfortable and then it would stimulate me to work harder before the next meeting (3K). e.g.: "their time management would be strictly controlled following the project program. And it was easy to do data collection, because the supervisor would arrange most things for this student" (3I). ● Saving supervisors' time and energy (1A, 2L, 2I, 3D) e.g.: "I can see all my students at the same time. It saves my time and energy" (1A). e.g.: "Group meeting is an effective way to spend centralized time for doctoral supervisors to guide their students" (2L). e.g.: "A supervisor generally hopes that students can produce more outcomes... group meeting is the best way to achieve this target, and this way benefits supervisors to save time, and this way also makes doctoral students gain long-term benefits" (3D). 	<ul style="list-style-type: none"> ● Not suitable for supervisors who have few students e.g.: I did not use group meetings because of two reasons, one reason is that I only have a few students, and the other reason is that it is not necessary to disturb students without important issues" (1J). ● Not for solving students' individual problems in details or private problems e.g.: "Some students feel nervous to discuss individual issues in a group meeting, so I will communicate with them individually" (1G). ● Too many members is not good e.g.: "too many students in the same group would reduce the meeting functionality, because students would feel tired if they had to sit through the whole meeting, and the time is little for each individual student" (2I).

Meeting types	Advantages	Disadvantages
Individual regular meetings	<ul style="list-style-type: none"> ● Providing more guidance in detail and benefiting to solve students' individual problems E.g.: "Individual regular meetings benefited me to solve my problems quickly, which would save my study time" However "group meetings might not be valuable for me to solve my research problems in detail quickly within a short time" (2O). e.g.: "I preferred to follow strict supervisor with regular meetings, then I might learn more during my PhD studying period and did not waste too much time" (3G). ● Benefiting to control students' PhD process and motivate students to work hard e.g.: "When I was a PhD student, I needed to see my supervisor regularly. I lost face if I could not achieve the tasks" (1A). e.g.: "individual regular meetings can reduce student' inertia and motive them to work hard" (1K). e.g.: "supervisors should give their students regular guidance and keep performing the strict academic training for them": the reason for it this result is that "students are general lazy. If supervisors do not regularly remind students to stick on their timeline, students may do not want to work and then delay their PhD process, or they could not pass the final examination" (3A). ● Saving students' studying time e.g.: "Individual regular meetings benefited me to solve my problems quickly, which would save my study time" However "group meetings might not be valuable for me to solve my research problems in detail quickly within a short time" (2O). e.g.: "I preferred to follow strict supervision with regular meetings, then I might learn more during my PhD studying period and did not waste too much time" (3G). 	<ul style="list-style-type: none"> ● Not suitable for supervisors who are too busy or have many doctoral students. e.g.: "Individual regular meetings bring pressures for both students and me. I need to spend lots of time, if I really meet with each student regularly. Students may feel uncomfortable and they do not understand why I do it" (1A). ● Hard to carry out, for part-time students "Regular meetings are just a kind of habit, which is not necessary...The important thing is that supervisors should be honest and care for students. They should like to help their students to deal with every subtle problem" (3E).
Irregular meetings	<ul style="list-style-type: none"> ● Providing more guidance in detail and benefiting to solve students' individual problems e.g.: "After I read a student's document which s/he sent me, I had a meeting to solve problems directly with him/her" (1E). ● Saving students' studying time e.g.: "this meeting style saves time for both students and supervisors. After I read a student's document which s/he sent me, I had a meeting to solve problems directly with them. The efficiency is very high" (1E). 	<ul style="list-style-type: none"> ● Will be ineffective, if both students and supervisor are all not organized e.g.: "I did not have contact with my supervisor in the whole year. He did not know what I did this year. If I did not take the initiative to make an appointment with my supervisor, I might not have any chance to graduate" (2L).

Appendix 7-3: The comments related to meeting contents

Stages	Meeting contents
First meeting (1A, 1I, 1G, 1J, 2A, 2B, 2C, 2D, 2E, 2F, 2J, 2P)	<p>“The planning of PhD training” includes:</p> <ul style="list-style-type: none"> ● clarifying the responsibility and functions of both supervisors and students, and showing the general schedule of students’ milestones ● “assisting students to select relevant courses in the first year of study” (1A), ● “determining an orientation of thesis with each student” (1A), ● “formatting rough schedule of students’ milestones including ‘Mid-term Examination’, ‘Thesis Proposal Seminar’, ‘Pre-submission Oral Review’ and ‘Thesis Submission’” (1A), ● “discussing students’ career development” (1I), and ● “ensuring the authors’ order when publishing together” (1G). <p>e.g. Responder 1J described how he worked with students, when they published together. “I am the first author in the first article, and the student is the first author in the second article. Students will be a single author for the third article, even if I still assist them to revise. The reason for this issue is that it is very difficult to publish articles in high ranking journal for students who have not enough reputation”.</p>
The early stage of PhD (1A, 1B, 1D, 1G, 1H, 1K, 2A, 2D, 2G, 2H, 2J, 2L, 2M, 2P, 2K, 3A, 3C, 3D, 3E, 3G, 3L, 3J, 3K)	<p>Topic selection</p> <ul style="list-style-type: none"> ● Topic selection according to individual interests <p>Advantages:</p> <ul style="list-style-type: none"> ◆ Reducing conflicts of topic selection between supervisors and students; (1D , 2L) <p>e.g.: “Supervisors need to respect students who are mature” (1D).</p> <ul style="list-style-type: none"> ◆ Increasing students’ enthusiasm 2K, 2L <p>e.g.: “People like to put more effort into their interesting things” (1H).</p> <p>e.g.: “If I force students to do projects, it is hard to make them persist to complete these projects, without interest” (1B).</p> <ul style="list-style-type: none"> ◆ Improving students’ academic ability <p>e.g.: “One of the differences between graduate education and doctoral training is: bachelor students wait for the lecturer to allocate tasks, but doctoral students need to have an enthusiasm to find projects actively by themselves” (1G).</p> <p>e.g.: “Finding research topic implied that I could successfully do at least half of my PhD” (3E).</p> <p>e.g.: “My supervisor encouraged me and supported my original idea to do the further research. That made me feel very comfortable and gave me an easy start to do this research, due to my abundant knowledge and research background in this area”(3D).</p> <p>e.g.: “If I do research, from a decision by my supervisor and this topic is very valuable, but I am not interested, even if I finish it, I still feel that has no meaning for me” (2K).</p> <p>e.g.: In general, their supervisors preferred students to select research by themselves, and supervisors did not intervene too much in their topic selection (3C, 3G and 3K).</p> <p>e.g.: Their supervisors provided macro-guidance on topic selection. If students had no clear ideas on topic selection, supervisors would pass the relevant journal papers and books for them to learn the knowledge structure in their PhD area. Then supervisors would keep negotiating to narrow down their research topics and make sure their research could be carried out (3A,3C, 3G, 3J and 3K)</p>

Stages	Meeting contents
	<ul style="list-style-type: none"> ● Supervisors give topics to students Providing a research direction or giving a research topic Advantages: saving students' study time for topic selection (2L) e.g.: "if a student does not find a research topic for a long time, I will give a topic to this student directly following her or his suggestion" (1H). e.g.: "if students did not research enough background in their PhD area, or were unsure what kind of topics, supervisor normally adopted the following two ways: topic selection in terms of students' interest, and topic selection following supervisor's suggestion" (3D). e.g.: "My supervisor wrote down eleven research topics which he considered to be valuable and hot topics in this area. Then he took one hour to introduce and explain these topics to all his new PhD candidates. He suggested his students to pick up one of these topics. I followed his suggestion and then chose a topic as my own research topic." (3L). <p>Supervisors also need to consider other two things in this stage</p> <ul style="list-style-type: none"> ◆ linking with students' career development E.g.: "most full-time students, who have strong knowledge background and who expect to become academics, prefer to do this. ◆ thinking of the feasibility of research topics for students This is linked with students' academic ability (1A), students' energy (1K), and the feasibility of data collection (1K). e.g.: "in the early stage of PhD process, it is hard for students to consider their research in the big picture. So supervisors have a responsibility to help students to think of it" (1K).
The Middle stage of PhD (1A, 1B, 1C, 1F, 1G, 1H, 1I, 2A, 2D, 2G, 2J, 2L, 2M, 2P, 3E, 3F, 3H, 3J)	Data collection and data analysis <ul style="list-style-type: none"> ● Encouraging to keep writing The majority of respondents encourage students to keep revising their literature at the same time. (2A, 2E, 2K and 2P) ● Passing relevant articles and theses e.g.: Passing relevant articles or similar theses to students could provide valuable clues, which benefit their further writing. (2G) e.g.: Two types of reading resources include "intensive reading, which benefits to accumulate the knowledge scope, and extensive reading, which benefits to provide clues of thesis writing" (2A). e.g.: "A process of thesis writing is a painful process without good model essays. I gain lots of ideas, which benefit my writing on my literatures for narrowing down my topic and on guidance of my research methodology and data analysis" (2A) e.g.: "I pass students the relevant articles or a thesis chapter which may be a good example for my students' analysis" (1F). However, most responders (1A, 1B, 1C, 1G, 1H, and 1I) emphasise that they only pass a relevant book list instead of keeping passing relevant journal articles to students. e.g.: "Doctoral students need to solve these problems by themselves. However, if I found they miss the important literature, I will point out it to them" (1C).
The end of stage of PhD (1A, 1B, 1C, 1F, 1G, 1H, 1I, 1J, 2A, 2E, 2M, 2N)	Revising whole theses according to supervisors' feedback <ul style="list-style-type: none"> ● Fast: one to three days for a chapter (1A, 1C, 1F, 1H, 1I, 1J 2A, and 2E), or one to two weeks for whole thesis (1B and 1J); ● Giving detailed recommendations, even spelling (1B, 1I, 1J, 2A, 2E, 2M and 2N); ● Keeping records accurately for comments on each students' version (1B and 1G) <p>"Two benefits exist for keeping comments on each version accurately. It benefits to communicate with students in the future, and this action motivates students to work hard and revise everything following my comments carefully" (1B).</p>

Appendix 7-4: Comments on the types of relationship between supervisors and students

Types of relationship	Descriptions what this relationship is like	Advantages	Disadvantages
Professional lecturer-student relationship	<p>“Supervisor had strict attitudes to assist and guide me rigorously in academic attitudes and skills. And I, as a student, respect him very much, due to his rigorous working attitude” (2A)</p>	<ul style="list-style-type: none"> ● Easier to provide effective and strict training e.g.: “the products, such as having basic academic abilities, publications or working opportunities, are the most important things for me. It is easier to provide me the effective and strict training through a sustained strong serious lecturer-students relationship” (2P) e.g.: “I appreciated my supervisor who is not deliberately making a closer relationship with his students, because sustaining only serious professional lecturer-student relationship is effective for students’ study”. (2I) ● Not involving too much in individual problems e.g.: “When supervisors sustain only the top-down relationship with their students, there is not involved too much in individual problems, which would influence the supervisory process”. (2I) ● Keeping supervisor’s power and authority for academic e.g.: “Once I discuss academic issues with my students, I am serious immediately. The power emerges unconsciously and directly between my students and me. All my students trust me and respect me during the academic discussion process”. (1B) e.g.: “Keeping professional lecturer-student relationship when they discuss academic problems, because “supervisors need to build an atmosphere, which makes students feel a power and authority from their supervisors (2G) [1] e.g.: “Across the whole PhD supervision process, it should be the main lecturer-student relationship. It is because when there is a certain distance between student and supervisor, the power and authority from the supervisor will have good execution effect”. (3F) 	<ul style="list-style-type: none"> ● Students bored e.g.: “I felt very tired if I always play a role of lecturer in front of my students, and my students also felt that I was crazy” (1F) ● Communication obstacles may occur between supervisor and students e.g.: “if supervisors only sustain a single traditional lecturer-student relationship, that make students feel bored and sometimes it would lead to communication obstacles between supervisors and students” (2H) e.g.: “My supervisor sustained only to serious I lecturer-student relationship with me. I was afraid of him, I talked with him carefully, I never argued with him. I knew that would bound my thinking ability, and it was not good for me to improve my communication ability. (2M) e.g.: “only keeps professional lecturer-student relationship, making their students feel the power through keeping distance”. (3A)

Types of relationship	Descriptions what this relationship is like	Advantages	Disadvantages
<p>A relationship like friends</p>	<p>“My supervisor played karaoke with all his students regularly, which made us build up a fantastic relationship like friends.” (2G)</p> <p>“In my mind, I had good relationship with my supervisor, who is closer than my normal friends to provide emotional support. I would like to share anything, such as my study and life problems and discussing social issues, with my supervisor”. (2H) [2]</p> <p>“Most doctoral students and graduates kept good relationships, which are like friend relationships, with their supervisor. Most students, who are supervised by the same supervisor, had regular parties organized by the students. All members within this party are like family members or friends” (3K).</p> <p>“The relationships between my supervisor and his students are all like friends. He always invited us to have dinner at his home. And if he had any problems or he needed to have a favour from us, he would let us know. For example, when he moved house, all his students went straight to help him, because we, as his students, believed that providing help was our responsibility” (3C)</p> <p>Some respondents indicated that “most supervisors remain in a relationship, they called it a relationship like a friend, but in fact, the true relationship is a friendly relationship, which is a relationship between professional lecturer-student relationship and a relationship like a friend” (2G).</p>	<p>● communication without barriers e.g.: “sustaining the relationship like friends benefits communication without barriers between supervisors and students both in academic and in personal life.” (2H)</p> <p>e.g.: keeping relationship like friends when they talk about other issues helps “students feel comfortable to accept supervisors’ guidance from supervisors’ attention for them”. (2G)</p> <p>e.g.: keeping a relationship like friends benefits to remain in comfortable relationship with students. “I have a harmonious private relationships with my students. We always have dinner together and joke like friends” (1E).</p> <p>e.g.: “This relationship benefits for effective communication between doctoral supervisor and students both in academic work and in personal life (3I).</p> <p>e.g.: “We remained in close relationship like friends since I started my PhD until now, even though I graduated several years ago. I did not feel any distance with her...and we are on the same wavelength” (默契) (3A). [6]</p> <p>● Providing emotional support for students See [2] [6]</p>	<p>● Too close friend relationship with students may lose supervisor power and authority See [1]</p> <p>● difficult to sustain a relationship by students e.g.: “Remaining in a relationship like a friend is linked to how much students do in academic work. Most students worried to see their supervisors, because they worried that they did not work well on their thesis. This action may affect the relationship like friends, even break this relationship. Under this situation, supervisor taking actions initiatively to maintain this relationship is the most effective way to break the ice”. (2H)</p> <p>● influence by age distance e.g.: “this relationship like friendship is hard to keep as the age distance increases between supervisor and student”.(3D)</p> <p>e.g.:” When a supervisor’s age is much bigger than his students’ age, the majesty from supervisor is shown automatically for his students. Even if this supervisor wants to have a close relationship with his students, students may still keep distance with their supervisor”. (3D)</p> <p>However</p> <p>“Supervisors generally had many students. It is hard to remain in relationship like friends with every student. So students need to foster this relationship by initiating visiting supervisors, greeting for holidays, and inviting supervisors for activities”. (2F)</p>

Types of relationship	Descriptions what this relationship is like	Advantages	Disadvantages
Parental relationship	<p>“I like to communicate any issues and share most information, which happen around me, such as falling in love, with my supervisor, who is like my father” (2H) [3]</p>	<ul style="list-style-type: none"> ● Culture influence e.g.: The traditional etiquette respected supervisor (lecturer) as father in China (Responder 2M). That can be shown through students’ daily behaviour. For example, A supervisor should sit in the host place when s/he have dinner with students (Responder 2M); students should walk following supervisor (Respondents 2M and 2N); e.g.: “With the increase of age distance between supervisors and students, the parental relationship has been unconsciously established” (Responder 2O). e.g.: “the age of most my students is similar to my children. I like to pass to them my experience both in the academic area and in the life field, because I have unconsciously a feeling that I am one of their family members” (Responder 1A). e.g.: “even if this traditional Chinese lecturer-student relationship is not required as an assessment standard for doctoral supervisors, and it may be very hard to achieve and sustain this relationship in current China...Due to the influence of Confucian culture, which is that the traditional lecturer-student relationship is like father-son relationship, the traditional parent-child relationship still needs to be advocated.” (3A) ● Providing emotional support for students See [3] ● Reducing communication obstacles See [3] 	
Peer-colleague relationship	<p>Ideal way for this relationship :</p> <p>“I wish to have an opportunity to discuss academic issues like a peer-colleague with my supervisor, even if strong arguments occurred in this process”. (2M) [4]</p>	<ul style="list-style-type: none"> ● Reducing communication obstacles (make students feel comfortable) See [4] e.g.: “My supervisor and staff, who worked in my department, gave me wedding gifts when I married, and they ran a farewell party, when I studied as a PhD student. Keeping a peer-colleague relationship helped me learn how academics work. This relationship benefits me to work independently when I start my academic career. So I keep this relationship as an associate relationship with my doctoral students”. (1I) 	<ul style="list-style-type: none"> ● Limitation from Chinese Culture influence relating to age distance e.g.: “when I see my supervisor, who is an old person, I unconsciously feel a power and distance from him and it is hard to start the peer discussion”. (2M) e.g.: “Due to the influence from Chinese culture, it is hard to build up the peer-colleague relationship with supervisors who had big age distance with their students.” (2N)

Types of relationship	Descriptions what this relationship is like	Advantages	Disadvantages
		<p>e.g.: “One of the advantages for keeping this relationship is that my supervisor provided a relatively relaxed learning environment for me. And it also benefits to improve quickly my skills following other lecturers’ help”. (3D)</p> <p>e.g.: Most doctoral candidates are mature. They have their own values. At this stage, the most comfortable relationship among people is peer relationship like colleagues”. However non-peer relationships made the student feel uncomfortable, which is as 3B suggested: “My supervisor provided much concern for me, but I did not feel comfortable, because I could only accept and had no opportunities to return. This unequal relationship pained me. I expected a peer relationship would be personal”. (3B)</p>	
Work relationship	<p>“As a supervisor’s employee, I had several chances go out with my supervisor on projects, and to join the social interaction with entrepreneurs and government officers, involved in supervisor’s projects, and who may benefit students’ career development in the future”. (2D) [5]</p>	<ul style="list-style-type: none"> ● Benefit of enlargement networks See [5] ● Improving independent working ability <p>Work relationship is also an ideal assistant relationship for 2D, who had no work experience, because “it is an effective training process, which benefit to improve my work abilities for adapting to a new working environment”. (2D)</p> <p>e.g.: “During my PhD studying period, I should spend the whole four years to focus more on studying, instead of focus on a friendship with my supervisor. The most important things for me was improvement of my research skills. So I believed that the pure work-relationship is enough to achieve this purpose and this relationship benefits doctoral students. (2H)</p>	<ul style="list-style-type: none"> ● Not good for academic atmosphere <p>e.g.: “Many students called their supervisors bosses, and some supervisors called themselves bosses, because they needed to give themselves titles for striving for new funding from new projects and effectively manage their projects. I do not think that is a good atmosphere to maintain academic thought. They should keep their minds on academic matters” (2M).</p>

Appendix 7-5: Comments on the influence of students' prior knowledge background

Respondent	Cite
<i>Responder 1A</i>	"If students have fundamental and solid knowledge background related to their research, they have more possibility to complete their PhD theses smoothly".
<i>Responder 1C</i>	"Management education backgrounds benefited students' topic selection and shaped the thinking in an academic way in the management discipline".
<i>Responder 1D</i>	"Many students without relevant knowledge background delay their graduation, because they needed to spend more time to select a research topic".
<i>Responder 1K</i>	"I only select people who have a similar education background, because doctoral training process is like a production-line. The lower level raw materials I use, the more opportunities of defective products emerged".
<i>Responder 2A</i>	"Many doctoral supervisors did not want to select me as their doctoral candidate, because I had no Management education background".
<i>Responder 2A</i>	"Compared to the students who had a relevant knowledge background, I felt it harder to finish my PhD study, especially in the early stages of the PhD process".
<i>Responder 2O</i>	"Management education background benefited my topic selection and further study, such as data analysis".
<i>Responder 2J</i>	Lack of a similar education backgrounds increased the difficulties for doing his PhD, especially in the stage of reviewing literature and selecting a research topic.
<i>Responder 3A</i>	Lack of Management background made the completion of my PhD thesis difficult.
<i>Responder 3B</i>	"Doctoral candidates who keep studying in the same discipline [from Bachelor to Doctor], have considerable competence. They have systematic professional theoretical knowledge. It is easier for these students, who had the same discipline background, to start their project".
<i>Responder 3B</i>	"I felt that completing my doctoral dissertation was a painstaking process, because I came from a different discipline"
<i>Responder 3B</i>	Due to lack of thinking ability as a Management academic and without experience of using SPSS software, I believe the process of completing my thesis was very hard.
<i>Responder 3K</i>	PhD candidates in my field need strong relevant discipline knowledge background, such as mathematics.
<i>Responder 3L</i>	I lack Management background. It makes me feel it is hard to finish my PhD thesis.

Appendix 7-6: The typical comments on the different of help from *tongmen* and *non-tongmen*

Peers	Help from peers and relevant comments	Respondents
<i>Non – tongmen</i>	<p>● Providing rough suggestion on projects e.g.: “my peers, who are supervised by different supervisors from me, provided me with many general suggestions on specific issues. This would help me to solve my project’s problems”.</p>	2D, 2F, 2I, 2J (2J)
	<p>● Enlarging professional knowledge e.g.: “The more opportunities of communication, with peers, the more benefits I got. When I communicated with candidates who are supervised by different supervisors, I could learn more knowledge [in their fields]...”</p>	(3I)
	<p>In China, most doctoral candidates live in student accommodation, and they share a room with other candidates. Usually, doctoral students are concentrated to live in the same building. This living environment increases communication opportunities for doctoral candidates.</p>	(3C)
	<p>e.g.: “I shared a room with two doctoral candidates. Even if the two candidates were from different disciplines, I always could be enlightened by them. When we discussed an issue, I could get ideas from different perspectives, because they were from different disciplines...I felt that I kept increasing knowledge in different disciplines, through communication with other peers (Responder 3C).</p>	(3C)
	<p>e.g.: “my major is traffic management. I felt that I knew much knowledge of sewage treatment through the communication with my roommate, a PhD candidate majoring in sewage. (Responder 3I).</p>	(3I)
	<p>● Emotional supports</p>	2D, 2G, 2M, 3F, 3I
	<p>e.g.: “I had really close and good relationship with my peers, who started their PhDs same as me or who shared the students’ accommodation with me. We provided emotional support for each other for working hard”.</p>	(2D)
	<p>e.g.: “We [<i>tongmen</i>] always get together to chat or play badminton together, which benefits me to relax well after study”</p>	(2M)
	<p>e.g.: “peers, especially candidates who are at the same stage, were always supportive in emotional terms”. To prove this supportive, 3F explained that “We were from similar cultural backgrounds and then we understood each other easily”.</p>	(3F)
	<p>e.g.: Responders 3I also mentioned that “peers, who were supervised by different supervisors, might easily get together and reduce pressures”, because “two doctoral candidates under the same supervisor had a strong competitive relationship, which increased study pressures for them”.</p>	(3I)
	<p>● Sharing general information</p>	2E, 3I
	<p>e.g.: “when I chatted with my <i>non-tongmen</i>, who worked in public service, enterprises or in university, I learned the truth and imply information on their job and welfare. The information benefits me to consider my further career”.</p>	(2E)
	<p>e.g.: “When I communicated with candidates who are supervised by different supervisors, I could...know more things about doctoral supervision, because different supervisors had different supervision styles”.</p>	(3I)

Peers	Help from peers and relevant comments	Respondents
Tongmen	<ul style="list-style-type: none"> ● Detailed and private guidance regarding thesis and publication <i>Tongmen</i> helped new starters to select quickly their topics, because they shared all existing materials, at their supervisor's suggestion. This action benefits both to save students' research time, and the development of academic research in a professional field. 	2F, 2H, 2I, 2J, 2L, 2O, 3B, 3H
	e.g.: "My research focused on a topic, which is a further study based on my TONGMEN's study, because before I started, following the supervisor's suggestions, this <i>tongmen</i> passed most his existing materials and his main thesis draft to me, before he submitted his thesis. That action made it easier for me to focus on a valuable and special research, which was also interesting for my supervisor".	(2H)
	e.g.: "I sent my articles to my <i>tongmen</i> , who started his PhD earlier than me, before I submitted these papers. He read carefully my article and then offered his valuable comments, even including checking spelling".	(2H)
	e.g.: "When I was doing my doctoral thesis, another <i>tongmen</i> , addressed as 'big sister', also helped me do a lot of things...She gave me many suggestions to design my questionnaire...Later I liked to discuss contents with her and asked her for her opinions on every chapter I wrote. I really appreciated it for the whole process...I believed that I got much help from her..., because we are <i>tongmen</i> ...So it is fair to say that, except for my supervisor, my 'big sister' looks like my second supervisor.	(2G)
	e.g.: Main benefits from his <i>tongmen</i> were derived from sharing the information and many resources in similar research projects. "I felt that I did further research based on my <i>tongmen</i> 's projects, which could help me quickly start my research".	(3B)
	e.g.: "Even if most peers may want to share information with each other, I think sharing to the extent I have talked about is not normal outside of the <i>tongmen</i> situation. My <i>tongmen</i> could share so much with me, because my supervisor suggested that he pass most of his thesis outcomes and also relevant materials to me. I think this suggestion from the supervisor is an important reason why my <i>tongmen</i> would provide this help for me".	(3H)
	<ul style="list-style-type: none"> ● Improving academic ability 	2F, 2H, 2N, 3B, 3C
	e.g.: Communication regularly with <i>tongmen</i> benefited to improve their communication ability and enlarge their professional academic ability.	(2F, 2H, 2N)
	e.g.: "My supervisor provided me many opportunities to work with my <i>tongmen</i> by participating in their projects. So <i>tongmen</i> guided me without having reservations. I learned many things from them and my academic abilities increased quickly."	(2N)
	e.g.: "I knew a <i>tongmen</i> , who wrote quite good papers, so I turned to him for help... He talked to me and guided me on a lot of things. ".He helped me set up and shape standards on writing papers. Then I had no problems with academic writing, such as writing on doctoral thesis and journal papers".	(3B)
	e.g.: "I learned lots from my <i>tongmen</i> , when we got together to complete our supervisor projects. The gains derived from my <i>tongmen</i> are knowledge, thinking abilities, an ability of controlling project progress and procedures".	(3C)
	<ul style="list-style-type: none"> ● Sharing the implied and detailed information 	2D, 2M, 3F, 3H, 3K, 3J
	e.g.: <i>Recruitment information</i> : 2M's <i>tongmen</i> leaked out some detailed recruitment information on position requirements and relevant interview questions in this department to her.	(2M)
		(2D)

Peers	Help from peers and relevant comments	Respondent s
	<p>e.g.: <u>Internship information</u>: 2D's <i>tongmen</i> introduced him to teach a course, which was taught by her. That is a good opportunity for 2D to practice his teaching ability and also earn extra income.</p> <p>e.g.: <u>New environment information</u>, such as adapting to a university or a new city environment for new students.</p> <p>e.g.: They can gain more benefits via their frequent opportunities to share information, such as information about conferences (Responders 3F, 3H), publications (Responders 3F, 3H), internships (Responder 3K). And graduates can come back to share the information about career trends and developments in industry trends (Responder 3J).</p> <p>● Building up the close and long-term networks</p> <p>e.g.: I am glad that I have a large group <i>tongmen</i> and I take care of this human resource as a kind of network. My supervisor lets me contact regularly with them for passing relevant information. So all <i>tongmen</i> are familiar to me. That benefits for me to enlarge my networks.</p> <p>e.g.: “because <i>tongmen</i> normally had regular contacts, they built up closer relationships easily, compared with other peers.</p>	<p>(2D)</p> <p>(3F, 3H, 3K, 3J)</p> <p>2D, 2G, 3F, 3H, 3K, 3J</p> <p>(2D)</p> <p>(3F, 3H, 3K, 3J)</p>

Appendix 8

Appendix 8: The relationships between supervisors and students that continue, when supervisors study as PhD students (○), during supervisor supervise their PhD students (✓), and ideal relationship (during PhD process for students and graduates, or after students' graduate for supervisors) (△).

Respondents	Lecturer - supervisor relationship	A relationship that is like friendship	Peer-colleague relationship	Parental relationship	work relationship
1A	○ ✓			○ ✓	
1B	○ ✓	○ ✓		✓	
1C	○ ✓	✓	○	✓	
1D	○ ✓	○ ✓ △		✓	
1E (no PhD)	✓	✓		✓	
1F	○ ✓			✓	
1G	○ ✓	✓	○	✓	
1H	○ ✓	✓ △	○	✓	△
1I	○ ✓	✓	○ ✓	✓	
1J	○ ✓	✓	○	✓	
1K	○ ✓	△		✓	
2A	✓ △	✓ △		✓	
2B	✓ △	✓ △		✓	
2C	✓ △	△		✓	
2D	✓ △			✓	✓ △
2E	✓ △			✓	
2F	✓ △	✓ △		✓	
2G	✓ △	✓ △		✓	
2H	✓ △	✓ △		✓ △	
2I	✓ △			✓	
2J	✓ △	✓ △		✓	
2K	✓ △	△		✓	
2L	✓	✓ △		✓	
2M	✓		△	✓	
2N	✓		△	✓	
2O	✓ △	✓ △	△	✓ △	△
2P	✓ △	△		✓	
3A	✓	✓ △		✓ △	
3B	✓		✓ △	✓	
3C	✓	✓ △		✓	
3D (2 nd PhD)	✓ ✓	✓ △ ✓ △	✓	✓	
3E	✓	✓ △		✓	
3F	✓ △			✓	
3G	✓ △			✓ △	△
3H	✓			✓	✓ △
3I	✓	✓ △		✓	
3J	✓	✓ △		✓ △	
3K	✓	✓ △		✓ △	
3L	✓ △			✓	

△ : Depending on supervisor's working style